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The Flowering Plants of Taiping, in the Malay Peninsula

By

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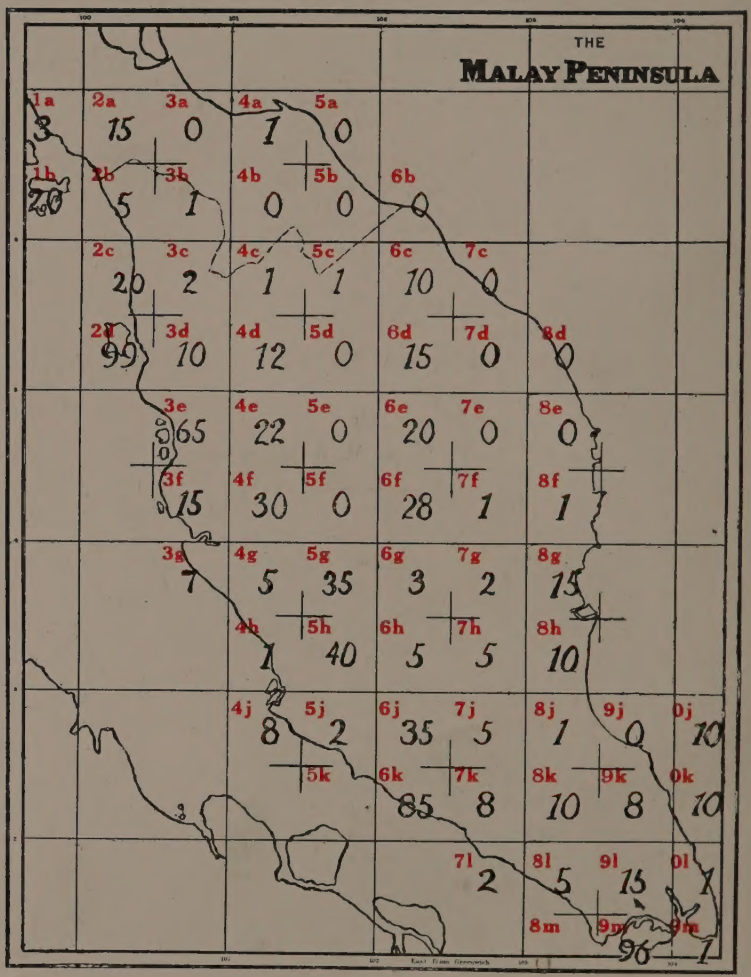
THE
MALAY PENINSULA
1a 2a 3a 4a 5a
3 15 0 1 0
1b 2b 3b 4b 5b 6b
20 5 1 0 0 0
2c 3c 4c 5c 6c 7c
20 2 1 1 10 0
2d 3d 4d 5d 6d 7d 8d
99 10 12 0 15 0 0
3e 4e 5e 6e 7e 8e
65 22 0 20 0 0
3f 4f 5f 6f 7f 8f
15 30 0 28 1 1
3g 4g 5g 6g 7g 8g
7 5 35 3 2 15
4h 5h 6h 7h 8h
1 40 5 5 10
4j 5j 6j 7j 8j 9j 0j
8 2 35 5 1 0 10
5k 6k 7k 8k 9k 0k
85 8 10 8 10
7l 8l 9l 0l
2 5 15 1
8m 9m 0m
96 1

DIAGRAM NO- 1

THE

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The Flowering Plants of Taiping, in the Malay Peninsula.

By

I. H. BURKILL and M. R. HENDERSON.

This is the first local Flora for any area within the Federated Malay States, and more also; for it gives in a very concentrated form a considerable amount of information about the distribution of the Higher plants in the Malay Peninsula. But it is not the first local Flora for any part of the Peninsula, as two exist. In the year 1894, Mr. C. Curtis published in the *Journal of the Straits Branch of the Royal Asiatic Society,* No. 25, a "Catalogue of the Flowering Plants and Ferns found growing wild in the Island of Penang"; and in the year 1900, Mr. H. N Ridley, in the same Journal, No. 33, published his "Flora of Singapore."

A catalogue of the Flowering plants of the territory of Malacca could be written up from the materials in the Herbarium of the Botanic Gardens, Singapore, and no doubt the time is not distant when it will be.

A few months ago, in order to answer an enquiry, a map of the Malay Peninsula was taken and divided between the lines of latitude and longitude, as opposite, so that squares of approximately 1500 square miles were formed; and for each of the squares an estimate of the number of species likely to occur was made: then the number of species proved to occur was calculated as a percentage of it. The percentages brought up to date have been inserted on the map: they suggest that the flora of the square *2d,* containing the island of Penang and the coast opposite, is that most thoroughly worked up, in as much as the number of the higher plants known to

occur in it appears to be 99 per cent of the probable quantity: the flora of square *9m*, containing the island of Singapore and some of the adjacent coasts, comes next at 96: Malacca follows at 85. The best known square of the rest of the Peninsula is *3e*, wherein is Taiping, Larut, much of Krian, with the hills, and back to the Perak river at Kuala Kangsar: its figure being 65. The enumeration which follows is for a part only of that square,—the part best known, i.e. the immediate neighbourhood of Taiping: it is of all the higher plants known to occur east of the Taiping-Kuala Kangsar and the Taiping-Batu Kurau roads, which make the western limit, and by curving round, indicate also the southern and northern limits; the eastern limit is along the summits of the Taiping Hills. The enumeration, perforce, stops at these summits, for nothing is known of the plants on the face towards the Perak river.

2. The materials for this Flora.

It is natural that the first local Flora for any area in the Federated Malay States should be for Taiping, as, after the opening of the States took place in 1874, no other place for a long time received similar attention from botanists.

To Taiping in 1877, Sir Hugh Low, after more than thirty-five years in Borneo, was called to be Resident; and in Taiping the enthusiasm for the study of plants which had caused him to send many beautiful Bornean species into cultivation, found expression in the organising of investigations. To him in 1877 Henry James Murton, Superintendent of the Botanic Gardens in Singapore, was sent that he might explore and report upon the available supplies of gutta-percha. Murton between October 18th and 22nd, in very bad weather, ascended the Taiping Hills and returned with collections of living plants which he despatched from the Larut river to Singapore. In a report on his tour (Straits Settlements Government Gazette for Feb. 22nd 1878) he mentions as found *Pinanga maculata* (a name for *P. disticha*, which species however, no subsequent collectors have found on the Taiping Hills), *Licuala acutifida* (which likewise has not been found there by anyone else), *Cissus porphyrophylla* (meaning *Piper porphyrophylla*), *Rhododendron javanicum, Rhododendron jasminiflorum, Nepenthes sanguinea, Calanthe curculigoides, Calanthe angustifolia, Anoectochilus setaceus, Anoectochilus Dawsonianus* (*Haemaria discolor*), and several ferns. Murton then proceeded to Kuala Kangsar and to Gunong Bubu; and did not return to do any more plant-hunting over Taiping. He probably misnamed the species that others have not collected.

Low in 1881 obtained the services of Leonard Wray for the purpose of opening up experimental gardens on the Hills; and Wray in 1883 was transferred to the post of Curator of the Perak State Museum, in Taiping, where he remained until 1908, collecting plants and building up a not inconsiderable herbarium.

In 1881 Dr. (afterwards Sir) George King, then Superintendent of the Royal Botanic Gardens, Calcutta, sent a collector, Hermann Kunstler, to Taiping, where we may well believe that Low directed his search for plants. And in 1882 the missionary, Father Benedetto Scortechini, came to Taiping on a long visit—a visit which lasted until his death in 1886, and during which he made considerable collections. Mr. Ridley states that he resided in Taiping at the Residency, and therefore it would be with Sir Hugh Low.

In 1889 Sir Hugh Low retired and Sir George King withdrew his collector.

Scortechini apparently failed in the art of ticketing material, and many of his localities are with difficulty recognisable: but Kunstler ticketed his with the greatest precision.

In the year after Scortechini's death, and when the Royal Botanic Gardens, Calcutta had acquired Scortechini's collections, it was proposed that Sir George King and Sir Joseph Hooker should collaborate in producing a book on "the Flowering Plants and Ferns of Perak, Penang, Singapore, and Malacca"; but Sir Joseph Hooker withdrew, pointing out that the time was not ripe, and Sir George King determined to produce "Materials for a Flora" instead. Thus it came about that from the Herbarium of the Royal Botanic Gardens, Calcutta, emanated in a long series of valuable papers the results of the work of the men who may be called Low's botanists.

Opportunities came at intervals for the Straits botanists to visit Taiping. Mr. Charles Curtis, of the Forest Service and Superintendent of the Waterfall Gardens, Penang, was there in December 1887, September 1889, May 1890, October 1892, June 1897, October 1900, and December 1901. These visits were short, and appear to have given 214 specimens. Mr. Walter Fox in 1899, during a period of acting for him, visited Taiping and collected 55 specimens. Mr. H. N. Ridley, as Director of Gardens, Straits Settlements, found his way to Taiping in March 1891, February and March 1892, June 1893, December 1902, February 1904, and August 1909—at least there exist herbarium specimens to the number of 663, so dated. Mr. Robert Derry, while serving in the Perak State at Kuala Kangsar, collected a little about Taiping in 1899, 1900 and 1902. Mr. James Webster Anderson, Assistant Curator of the Botanic Gardens, Singapore, in 1911 took a holiday in the Taiping Hills and collected. Mr. C. Boden Kloss in May 1909 collected also. In the year 1904 Bishop G. F. Hose collected about Taiping, and the Hon'ble Mr. E. S. Hose, now Colonial Secretary, Straits Settlements, collected on Gunong Hijau in 1917. A few specimens exist collected by Mr. D. F. A. Hervey, formerly Resident Councillor, Malacca, by Mrs. Bland, wife of a Resident Councillor of Penang, by Messrs. A. B. Stevens, B. H. F. Barnard, and other Forest officers, by Mr. A. R. Venning of the Administrative Service, Sir Graeme Elphinstone, the planter, Sir Walter Napier, the lawyer and at one time the Attorney-General, the late

Mr. C. Robertson-Glasgow, and Mr. W. R. Long. In February 1917, two members of the Straits Settlements Gardens Department, Mr. Mohamed Haniff, a Field-Assistant, and Mr. Mohamed Nur, Herbarium Assistant, were sent to the Taiping Hills for living and dried plants. In February 1924 one of the authors (I. H. B.) spent a fortnight on the hills, accompanied by Mr. Haniff, and collected 520 specimens; the other author (M. R. H.) was at the time stationed in Taiping and had been there for some months, using considerable opportunities chiefly for collecting at lower levels.

All the work of the collectors named is brought into one view in the following pages: and the writings of Sir George King, Mr. J. S. Gamble, and Mr. H. N. Ridley have been fully utilised. The result is a list of 1980 species.

3. The country.

A wide belt of mangrove forest, intersected by the muddy Larut river and by many creeks, extends from the Straits of Malacca half-way to Taiping town; and for the other half of the way the land rises almost imperceptibly: so that Taiping is but 70 feet above sea level. The lowland upon the west of Taiping is outside the area of the enumeration. On the eastern edge of Taiping the hills rise almost abruptly.

Apparently at one time by the dweller in the plains the hills were collectively designated Gunong Hijau, that is to say, the Green Mountain.§ But when paths began to be made into them, more accurate naming was necessary; and a clearing at 2000 feet (or 610 metres) was called the Tea Gardens from its purpose, and another between 3200 and 3700 feet, (or 975 and 1128 metres) was called Maxwell's Hill; two summits a little further off were named Birch's Hill and Caulfeild's Hill, and " Gunong Hijau " was applied to the highest and most remote summit. Birch's Hill reaches 4400 feet or 1340 metres, Caulfeild's Hill 4500 feet or 1372 metres, and Gunong Hijau 4750 feet or 1445 metres. From these three the Batu Kurau stream gets its waters, sinking into a deep hollow east of the spur whereon, facing west, is Maxwell's Hill clearing, the summit of the spur carrying a house called the Box at 4078 feet or 1240 metres. There are no greater heights over Taiping.

Murton tried by means of an anaëroid barometer to ascertain the heights which he reached, and got them too high. Too high also are the heights given on some of the labels of Curtis and Ridley. These, the authors have, as far as possible, corrected in their enumeration.

The Taiping Hills are of granite. They are the central part of a short range extending from 4° 30′ to 5° 45′, with conspicuous summits north and south of Taiping higher than Gunong Hijau, known as Gunong Bintang and Gunong Bubu. Both are botanically unknown. The map opposite indicates the geographic relation-

§ Gunong Ijok or Arenga Mountain offers an alternative origin.

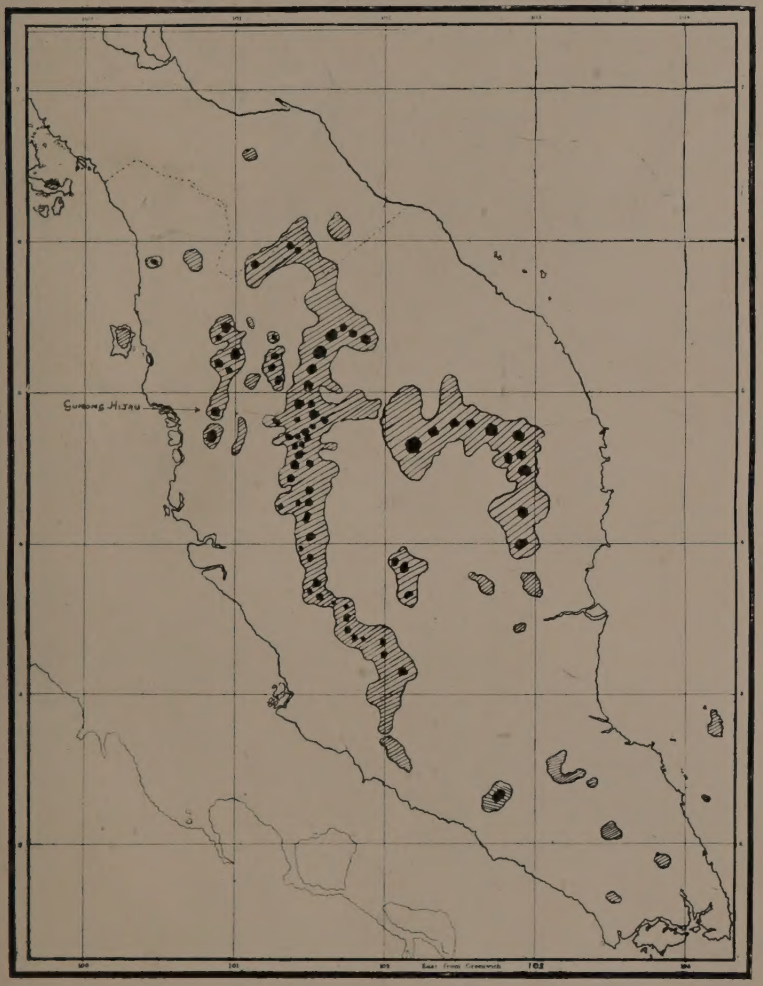


DIAGRAM No. 2.—MOUNTAINS OF THE MALAY PENINSULA OVER 2,000 FEET AND OVER 4,000 FEET.

ship of the Taiping Hills to all land exceeding 2000 feet or 610 metres and all land exceeding 4000 feet or 1220 metres. The nearest hills are (i) those of Penang, reaching 2724 feet or 837 metres, to the north-west and 50 miles away, (ii) Kedah Peak reaching 4000 feet or 1218 metres, 70 miles to the north-north-west, (iii) a lesser, much interrupted parallel range immediately east of the Perak river at no great distance, and (iv) at the distance of about 40 miles the Main range with numerous much higher summits. This part of the Main range happens to be the least known part; and most of the hills lying between the Main range and the Taiping Hills are botanically quite unknown. All are alike densely forested.

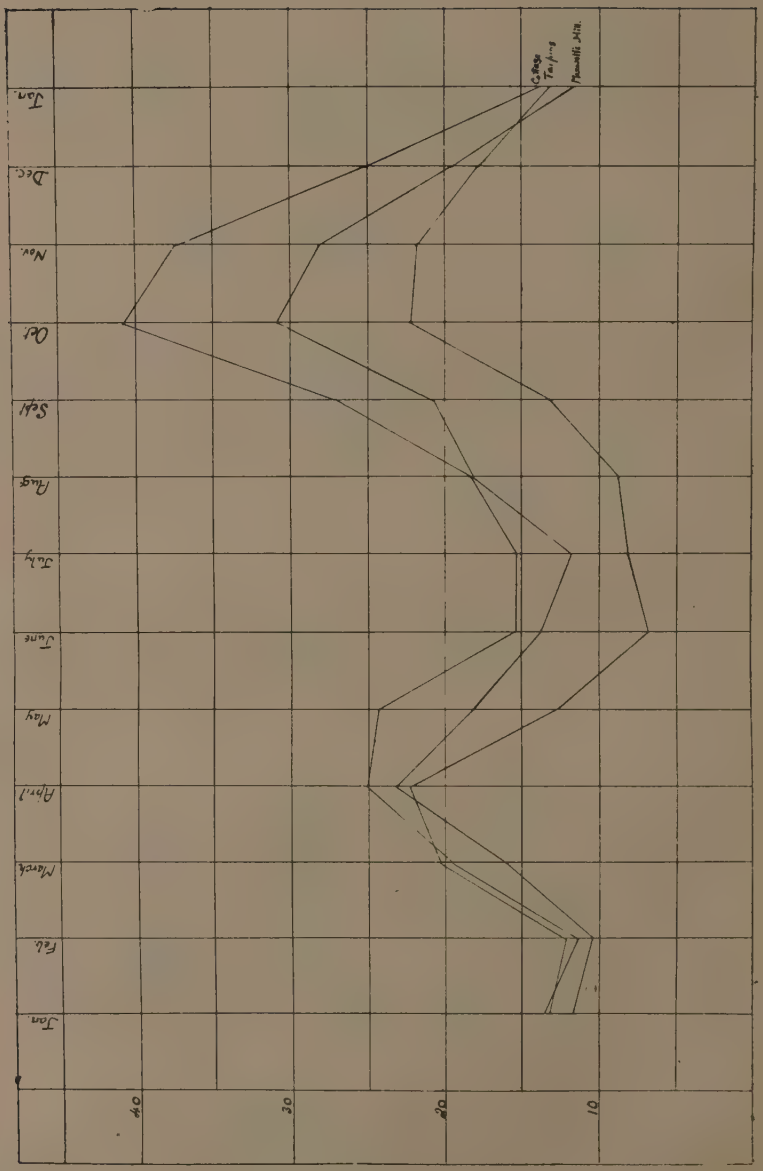
On the northern face of the summit of Gunong Hijau is a little patch of "Mossy forest," limited abruptly in a very interesting way. Elsewhere the forest changes type gradually from the tall lowland forest to the montane forest. The clearings in it are quite artificial. There are extensive continuous agricultural and mining clearings of the plain; the clearing known as the "Tea Gardens"; the considerable clearing of Maxwell's Hill, where much gardening is done and cattle are kept; clearings about a few higher houses; and the Trigonometrical Survey's clearing, for observation purposes, of the summit of Gunong Hijau. A demand for firewood is causing some enlargement of these clearings and the search for fodder for the cattle tends to the preservation of any patch of grass that can be cut.

Murton in 1877 found three clearings on the hills. There was one for cinchona, one of two acres made at Birch's orders which then was in the process of returning to secondary forest, and a small clearing made by squatters but newly abandoned. Abandoned clearings in these wet hills soon close up.

4. The Climate.

There are two periods of heavy rain in the year, occurring when the sun is overhead. At the autumnal equinox the rain is heavier than at the vernal equinox; and there is this great difference between the two periods, that during the inset of the rains of the vernal equinox, the wind being from the western side of the hills, the precipitation is similar at all elevations; but during the rains of the autumnal equinox, when the wind is blowing on the Taiping face of the hills, the higher levels receive a great deal more than the lower levels. At this time they are very wet, so wet that the sowing of peas, beet and some other temperate vegetables is useless, as they cannot be grown.

In diagram No. 4 the seasonal rainfall of Taiping town is contrasted with the seasonal rainfall of Penang (to which, from among the curves there given, it is most similar), of Kuala Lumpur, Malacca and Singapore. The rainfall of Calcutta is also given. It is clear from these curves that Taiping is a wet place. Botanists desire to know if the area constitutes a climatic island: but they



Rainfall at and over Taiping.

get very little help from meteorologists, as astonishingly meagre attention has been directed to the study of such phenomena in the Peninsula. We have examined as far as possible the phytologic evidence for such a view; and in default of meteorological facts a very non-committal attitude is necessary.

The altitude at which clouds form has not been recorded.

The dates of flowering given below suggest that February is the season of most flowers; and this indeed may well be the case. The records also suggest that towards the end of each rainy period there is a lull in flowering and that there is also a lull in July when rain is relatively light. We are not convinced that this is exactly the case: but there is certainly a lull in flowering in parts of the Malay Peninsula in June and July, such as might conceivably extend to the Taiping Hills. We make these remarks to encourage observation.

The rain about Maxwell's Hill makes it necessary in cultivation to keep a roof over plants of *Pelargonium zonale* (the Garden Geranium), *Dianthus caryophyllus* (the Carnation), and *Heliotropium peruvianum* × (Garden Heliotrope): and it may be partially responsible for a dwarfing of certain introduced weeds, such as *Poa annua*, *Stellaria uliginosa*, *Calamintha gracilis*, and *Andropogon aciculare* which commence flowering at a very early stage in their growth.

5. The Vegetation.

Pages 3-6 of Sir George Maxwell's "In Malay Forests," if not written of the Taiping Hills, give the most excellent idea of their beautiful forests. The plate in Sir Frank Swettenham's "British Malaya" which is opposite p. 118, is of the forests as they lie under the Cottage.

The lower forests contain a wealth of Dipterocarpaceae, and as many of the species are among the tallest of the trees, their conspicuousness is great. They disappear upwards; but an undetermined *Shorea* reaches 3700 feet. Species of *Palaquium*, *Swintonia* and *Sloetia* are obvious with them and disappear upwards too. The lesser trees, the shrubs under them and the small woody plants exhibit the features typical of Malaysian forests. A few species of herbaceous genera, that are better developed at some altitude, appear quite low down, and are disappointing as being less showy than related species found higher; such for instance is *Camptandra parvula*, which keeps its flowers open all day, whereas the larger *Camptandra ovata* is a showy night-flowering plant: *Sonerila erecta* is the poorest of its genus, and descends low, but is not the only *Sonerila* low down; and *Didymocarpus albo-marginata* as found below 2000 feet is small-flowered.

In the upper forest, by reason of the somewhat lesser stature of the trees, which consequently admit more light to the ground—and this is especially so if the slopes are very steep—terrestrial herbs are more conspicuous. Several Sonerilas are found, several Didy-

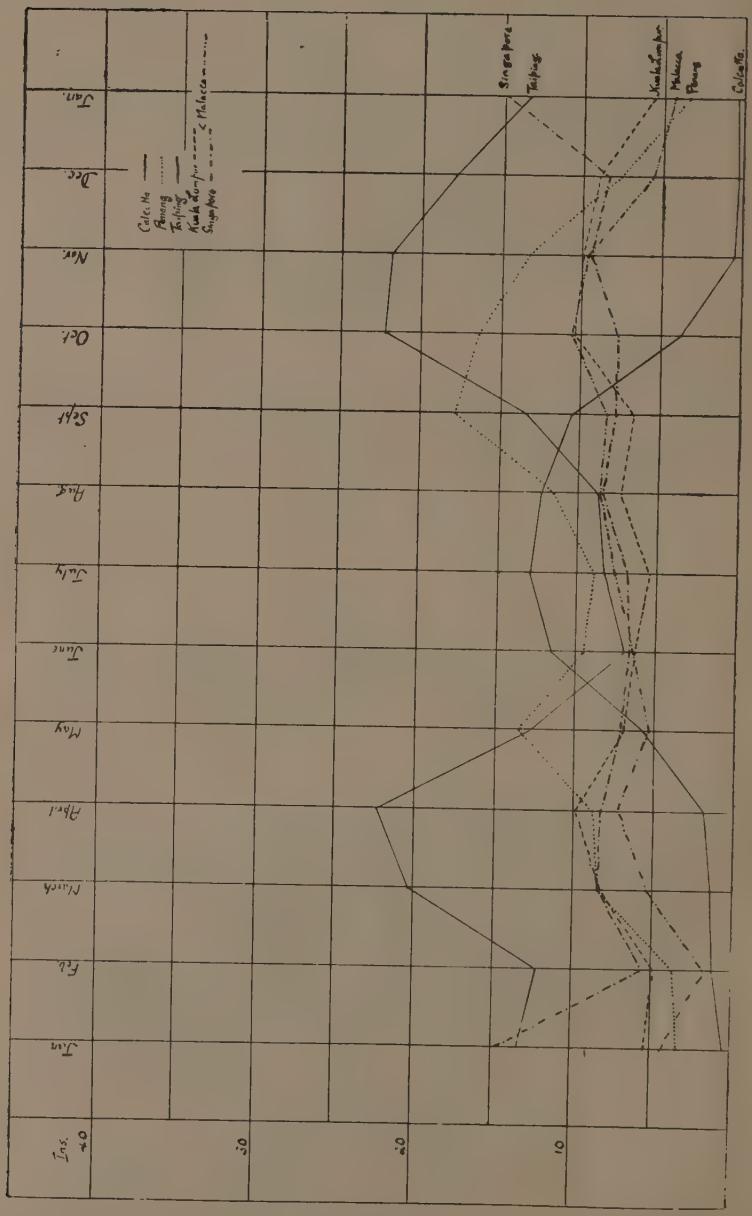

Jan.
Feb.
March
April
May
June
July
Aug.
Sept.
Oct.
Nov.
Dec.
Jan.
Inches
40
30
20
10
Singapore
Penang
Kuala Lumpur
Malacca
Calcutta

Diagram No. 4

mocarps, more than one *Argostemma*, Alocasias and Arisaemas. Some of them occur as a rule as isolated individuals: others make little groups: and on the south face of Gunong Hijau where the steep hillside almost becomes a cliff, so much light gets in that there is a bank of herbs.

Another feature of the upper forests is the "tree-gardens." Species of *Vaccinium*, *Rhododendron*, *Diplycosia*, ferns, orchids, and aroids, make them. They grow and grow until they destroy themselves by their own excessive weight in falling to the soil.

Ternstroemiaceae become more evident in the upper forests and then the Saxifragaceae come to notice.

Mosses both in the lower forests and the upper forests, where they are more numerous, are not on the soil, but on projections from the soil, such as tree-roots and stones, everywhere except in the one small patch of "Mossy forest" on Gunong Hijau. There they coat the soil, the change from opportunism in taking advantage of roots and stones to dominance in coating the soil being extraordinarily abrupt.

The aspect of the "Mossy forest" is towards the north; its altitude from 4650 to 4750 feet (1417 to 1445 metres). The most abundant tree is *Eugenia caudata*, which attains there 15 feet in height. Scattered individuals of *Weinmannia Blumei* growing with it attain 25 feet, and they are the tallest of the associated trees. *Illicium cambodianum*, *Gomphandra lanceolata*, *Melastoma sp.*, *Ixora concinna*, *Pavetta indica*, *Lasianthus rhinocerotis*, *Wikstroemia Candolleana*, *Phyllanthus frondosus*, *Daphniphyllum laurinum*, *Ficus variolosa*, and *Pleomele elliptica* occur.

At the edge towards the clearing of the summit of Gunong Hijau *Rhododendron malayanum*, *Diplycosia microphylla* and *Eria vestita* are present as epiphytes; and *Gleichenia spp.* climb. In the moss upon the ground are the ferns *Dryopteris gracilescens*, *Diplazium sylvaticum*, *Lindsaya scandens*, an *Oleandra*, and *Trichomanes proliferum*; and the following lowly plants:—*Argostemma involucratum*, *Labisia pothoina*, *Loxocarpus coerulea*, *Piper penangiana*, the parasite *Balanophora ?multibrachiata*, a *Coelogyne*, a *Justicia*, and in great plenty *Phyllagathis hispida*, and a few palms of two species, one being a *Pinanga* and the other a *Licuala*, either *L. malayana* or *L. modesta*. Of climbers *Nepenthes sanguinea*, *Flagellaria indica*, *Dioscorea laurifolia*, *Smilax laevis*, *Rhaphidophora Korthalsii*, a *Vitis*, and a *Calamus* are present.

The low stature of the trees is undoubtedly one of the factors leading to the mossiness: but again the mossiness by creating an acid humus may determine the low stature of the trees. A more important cause for the mossiness appears to lie in the smallness of the leaves, which the overhead trees shed on the ground. It is found that *Eugenia caudata* is by no means confined to this "Mossy forest," but is quite common as a tree of the second rank under other trees, such as *Gordonia taipingensis*, *Schima Noronhae*, *Magnolia Maingayi*, *Barringtonia Scortechinii*, and *Quercus*, and that

when these trees are present no moss occurs upon the surface of the soil, but only upon projections from the soil such as roots and stones. From this it appears that the denser shade does not bring about the little-mossy condition: but that the nature of the leaf-fall produces it; for it occurs where the trees shower down upon the ground large leaves which do not decay very rapidly, but are beaten onto the surface of the soil by the heavy tropical rain and do not permit under them the growth of any thing depending for its life upon light, such as a moss protonema, but are only disturbed from their smothering effect by the stouter epicotyls of the vigorous seedlings of trees, etc., so frequently met with in these forests and backed by a considerable supply of reserve food.

The absence of large-leaved species of shading trees from the north aspect of the cone of Gunong Hijau probably in someway arises from the climatic conditions there, and should be studied. The abruptness of the change from "Mossy forest" to other forest suggests that the balance of nature has at this point got to an unstable position where a small cause can produce a big effect.

The condition of the contiguous clearing is worth study. The bracken fern, *Pteridium aquilinum,* is the commonest plant on the top, and second to it another fern, a *Nephrolepis.* With these are further ferns, e.g., *Dipteris conjugata, Blechnum orientale, Polypodium incurvatum, Alsophila glauca, Histiopteris incisa,* tied together with *Lygodium,* and run through with *Lycopodium cernuum.* Running through also are *Vitis trifolia, Nepenthes sanguineum, Isachne albens,* a *Rubus* and a *Smilax.* Standing in the tangle here and there are plants of *Curculigo latifolia, Dianella ensifolia, Gahnia javanica,* and *Imperata arundinacea.* Pushing themselves into prominence are young individuals of the woody plants *Weinmannia Blumei* and *Glochidion laevigatum.* Here and there are the herbs,—*Erechthites valerianifolia, Torenia atropurpurea, Spathoglottis aurea, Sporolobus indicus*: and of smaller weedy plants, *Sonerila erecta, Emilia sonchifolia, Kyllinga melanosperma, Scleria elata, Paspalum scrobiculatum, Paspalum conjugatum, Pogonatherum crinitum,* and there is a *Selaginella,* apparently *S. suberecta.*

The growth is less dense upon the side of the summit adjoining the "Mossy forest" than upon the other side of the Survey Beacon: and this is probably a consequence of the "Mossy forest" having occupied that side before the Survey cleared the hill-top.

This vegetation, which is a stage in a sere, or in less technical words, a transitional stage of returning forest, is not repeated upon the lower clearings. In them man's interference has been more continuous, and has led to the importation of a number of alien weeds. *Sagina apetala, Cardamine hirsuta, Galinsoga parviflora,* and *Poa annua* have probably arrived with European seeds: *Stellaria uliginosa* may have come from the same direction or from Japan: *Nasturtium indicum, Mimosa pudica, Blumea chinensis, Crepis japonica, Erigeron sumatrense, Spermacoce ocymoides, Solanum verbascifolium, Scoparia dulcis, Pilea muscosa,* etc. have only journeyed from the base of the hill. *Calamintha gracilis*

perhaps has come from Japan. These are all well established. *Oxalis corniculata* occurs. Commoner than any other weed at Maxwell's Hill is *Ageratum conyzoides;* and it exists in two forms. Exceedingly minute plants may be found in flower, but it reaches a quite normal size. *Impatiens Holstii,* a native of East Africa, is running wild. *Datura suaveolens* and *Tithonia diversifolia* are established. *Tritonia crocosmaeflora* appears to be spreading.

Towards the lowest parts of Maxwell's Hill where the clearing is of the longest duration bracken occurs in small quantities; and *Colocasia esculenta* has established itself. Higher up, the banks of the terraced cultivation are either covered with a rather coarse weedy growth: or if kept cut are largely coated with *Marchantia* mixed with minute weeds, and often with a quantity of *Hydrocotyle asiatica.*

Of the species enumerated, 34% are trees, 22% are climbers, 19% are shrubs, 18% are herbs, 10% are epiphytes, and 1% are parasites.

6. An analysis of the Flora geographically.

Malaysia from Moulmein, and with the Andaman islands, to New Guinea constitutes one of the "botanic regions" of the World. The Malay Peninsula, either from the Isthmus of Kra southwards or from some point south of the isthmus, Sumatra, Java, Borneo, and all the attendant isles about them up to Wallace's line constitute a "subregion," the Western Malaysian. This subregion can be divided again into sub-sub-regions, one of which is the Malay Peninsula: and when knowledge has grown enough, the Malay Peninsula will be found divisible into botanical sub-sub-sub-regions. We surmise that perhaps two of these meet in the Taiping area, one characterised by the features of what we may call the "Larut flora," and the other by features which mark the flora of the Central Montane area of the Peninsula; and we put forward the suggestion that these two exist, as one on which to work.

The number of species in the list is 1980: of them 41 have been introduced by man. Deducting these, the species known as natural to the Flora are 1939.

7. The endemic element, 860 species.

The geographic limit which Mr. Ridley accepted for his *Flora of the Malay Peninsula* is the 7th degree north: 819 of the species in this list, as we know them at present, do not occur outside Mr. Ridley's Malay Peninsula. But if the Isthmus of Kra, as is better, be taken for the limit northwards of the Malay Peninsula, 860 of the species in the list are endemic.§

§ Three of the species counted "endemic" to the Peninsula exist upon the Dutch Islands immediately south of Singapore. This extension beyond the political Peninsula is ignored here.

8. The local species, 196.

By local species we mean the species in the list which are not known to occur in the Peninsula anywhere except in squares *3e* and *3f*.

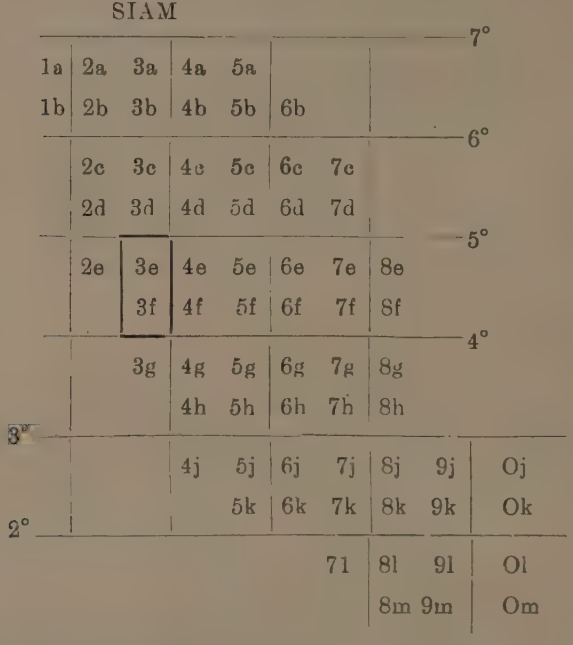


Diagram No. 5; the area for "local species," 196 in number.

Out of the 196 local species, four only are recorded at present as adding square *3f* to square *3e*, being *Synaptea perakensis, Synaptea Lowii, Aristolochia minutiflora and Mallotus Wrayi*—being Taiping plants which have been found in the Dindings. It seems reasonable to consider them as local; but their number is so small that it scarcely influences our discussion.

Out of the 196 species:—

7	of them occur	above	4500	feet
26		between 4000	and 4500	feet
22		between 3500	and 4000	feet
39		between 3000	and 3500	feet
17		between 2500	and 3000	feet
15		between 2000	and 2500	feet
9		between 1500	and 2000	feet
16		between 1000	and 1500	feet
39		between 500	and 1000	feet
53		below 500	feet.	

These figures show very clearly that the local and endemic element is by no means exclusively a montane development: but that

on the other hand it is strongest in the lowest belt. They suggest the presence of endemic species belonging to two evolutionary areas, one, the local species which have originated at low levels; the other species requiring higher elevations and for which the lowlands are unsuitable.

The following is a list of the species known only to exist below the 2000 feet contour line:—

Griffithia cupularis
Polyalthia dumosa
Polyalthia macrantha
Polyalthia pachyphylla
Melodorum litsaefolium
Cyclea elegans
Alsodeia cinerea
Garcinia dumosa
Calophyllum subsessile
Shorea Kunstleri
Synaptea reticulata
Sterculia Kunstleri
Scaphium longiflorum
Brownlowia macrophylla
Pentace macrophylla
Pentace perakensis
Pentace strychnoidea
Eleocarpus Barnardii
Santiria macrocarpa
Chisocheton rubiginosa
Aglaia macrostigma
Lophopetalum Scortechinii
Salacia Wrayi
Colubrina anomala
Nephelium setosum
Semecarpus lucens
Melanochyla Kunstleri
Melanochyla densiflora
Agelaea pinnata
Crudia gracilis
Ormosia scandens
Kunstleria Kingii
Caesalpinia parviflora
Parinarium Kunstleri
Parinarium elatum
Eugenia Dyeriana
Eugenia Gageana
Eugenia Hoseana
Eugenia Koordersiana
Eugenia mollis
Eugenia nigricans
Eugenia Prainiana
Eugenia Pearsoniana
Eugenia quadrata
Eugenia setosa
Eugenia tecta
Barringtonia pauciflora
Memecylon epiphyticum
Memecylon floridum
Memecylon Curtisii
Momordica Clarkeana
Uncaria Kunstleri
Ardisia Wrayi
Bassia Kunstleri
Bassia longistyla
Melodinus citriformis
Phyllanthera perakensis
Genianthus rufo-velutinus
Erycibe magnifica
Erycibe strigosa
Didymocarpus serratifolia
Chirita Glasgovii
Staurogyne pauper
Gymnostachyum magis-nervatum
Phlogacanthus brevis
Premna sterculifolia
Piper Kotanum
Beilschmiedia insignis
Alseodaphne insignis
Alseodaphyne paludosa
Alseodaphne Wrayi
Litsea claviflora
Litsea oblanceolata
Litsea patellaris

Litsea pustulata
Litsea Wrayi
Cinnamomum cinereum
Cinnamomum Kunstleri
Henslowia Wrayi
Helicia rufescens
Elytranthe diantha
Cleistanthus podocarpus
Coelodepas longifolium
Ptychopyxis Kingii
Bulbophyllum perakense
Alpinia macrostephana
Costus Kunstleri
Korthalsia tenuissima
Pothos Kingii
Pandanus Scortechinii
Mapania longispica
Homalonena nutans

The following is a list of the species known to occur above the 3000 feet contour line. (The species which occur both below the 2000 and above the 3000 feet contour lines, or occur only between them, are not listed).

Gordonia taipingensis
Megaphyllaea perakensis
Dysoxylum interruptum
Roureopsis Scortechinii
Polyosma grandis
Osbeckia perakensis
Melastoma sp.
Oxyspora floribunda
Campimia Wrayi
Impatiens Curtisii
Gardenia virescens
Amaracarpus caudatus
Psychotria Scortechinii
Lasianthus montanus
Antistrophe Curtisii
Symplocos Brandiana
Cleghornia gracilis
Microchites tubulosa
Toxocarpus Scortechinii
Genianthus Ridleyi
Dischidia sp.
Gaertnera oblanceolata
Lettsomia Scortechinii
Didissandra quercifolia
Chirita elata
Staurogyne macrantha
Justicia Clarkeana
Premna Derryana
Beilschmiedia Foxiana
Machilus Scortechinii
Actinodaphne montana
Litsea monticola
Daphniphyllum lancifolium
Ficus sp.
Pasania Scortechinii
Liparis atro-sanguinea
Liparis furcata
Liparis parvula
Dendrobium Foxii
Bulbophyllum ochranthum
Ceratostylis puncticulata
Anoectochilus ?calcaratus
Anoectochilus pectinatus
Goodyera gracilis
Geostachys decurvata
Curculigo megacarpa
Licuala modesta
Calamus viridispinus
Daemonorops aciculatus

It appears possible that the hot wet country between the montane flora of the Taiping range and the sea has served as the place for the genesis of the lowland local endemic species as a peculiar element giving recognisable characteristics to the Larut Flora.

9. Penang in relation to the Taiping Flora, with 34 restricted species.

Penang and Province Wellesley more or less constitute the land in square *2d*. Common to *2d* and the squares *3e* and *3f* are 34 endemic species, unknown from elsewhere.

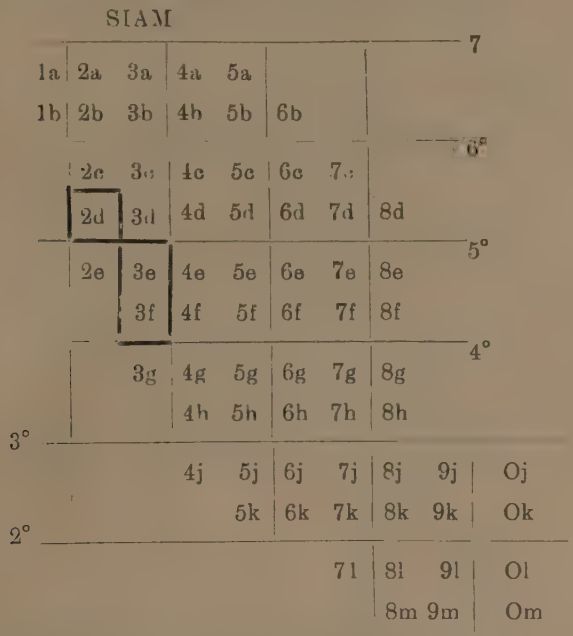


Diagram No. 6, of the area of the species of Penang with Taiping, 34 species.

These are their names, with a dagger against them if they are lowland species in the Taiping area, and a star if they are montane: but no mark if they are intermediate, or if they occur both below 2000 feet and above 3000 feet or if they are of unrecorded elevation.

Xanthophyllum Kunstleri†
Xanthophyllum pulchrum†
Adinandra maculosa*
Pachychlamys Hemsleyanus†
Byttneria Curtisii†
Glycosmis macrophylla†
Santiria longifolia†
Melanorrhoea inappendiculata
Melanochyla nitida†
Bauhinia lucida†
Anisophyllaea Curtisii
Anisophyllaea Gaudichaudiana†
Eugenia Kunstleri†
Memecylon Wallichii†
Uncaria trinervis†
Randia Curtisii†
Psychotria morindaefolia
Bassia Curtisii†
Diospyros apiculata†
Melodinus coriaceus†
Anodendron pauciflorum†
Trachelospermum Curtisii
Erycibe praecipua
Justicia Maingayi†
Litsea nidularis†
Rhopalocnemis ruficeps
Cleistanthus ellipticus†
Cleistanthus menbranaceus†

Cleistanthus pedicellatus	Bulbophyllum leptosepalum*
Antidesma pachystachys†	Globba Wallichii*
Claoxylon Wallichianum	Amorphophallus minor

There are five herbs among them, one being a parasite and another an epiphyte. All the species are forest plants.
Measured by their occurrence on the Taiping hills are montane—not having been found below 3000 feet, and 22 are lowland, not having been found above 2000 feet.

10. Taiping and the mountains to the North-North-West.

The mountains north of Penang will next be discussed. The three, Kedah Peak (or Gunong Jerai), Penang and the Taiping Hills, in the present state of our knowledge, cannot be found to carry any single species which is not elsewhere; though common to two of them are a few species: for instance common to Kedah Peak and the Taiping Hills, but absent (as far as we know) elsewhere is *Talauma Kunstleri,* which descends at Taiping to 2500 feet: common to Gunong Raya in Langkawi and the Taiping Hills but absent elsewhere is *Gastrochilus albo-marginata*: common to Penang, Gunong Raya and the Taiping Hills but absent elsewhere are *Zizyphus affinis, Baccaurea Kingii,** and *Arisaema Kunstleri.** The last two are found high in the Taiping Hills.

There is no evidence in this meagre list suggesting that the area of the following diagram is a natural one as regards its high land.

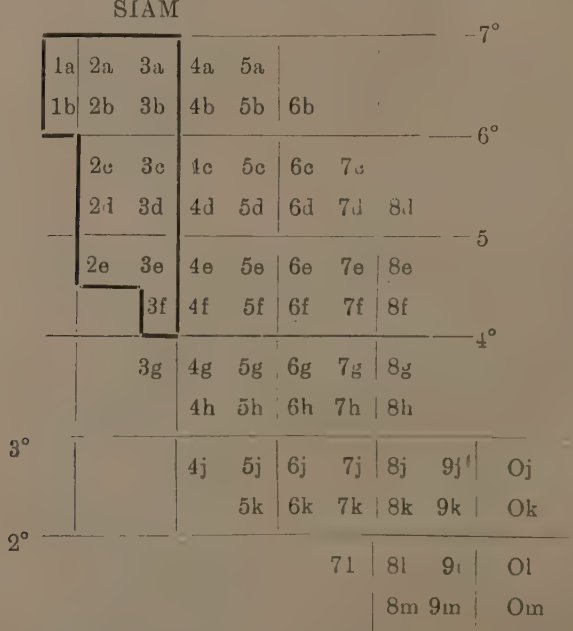


Diagram No. 7—the area north and north-north-west of Taiping, for which no more than 5 species are recorded.

11. The relationship of the vegetation of Upper Perak to that of Taiping.

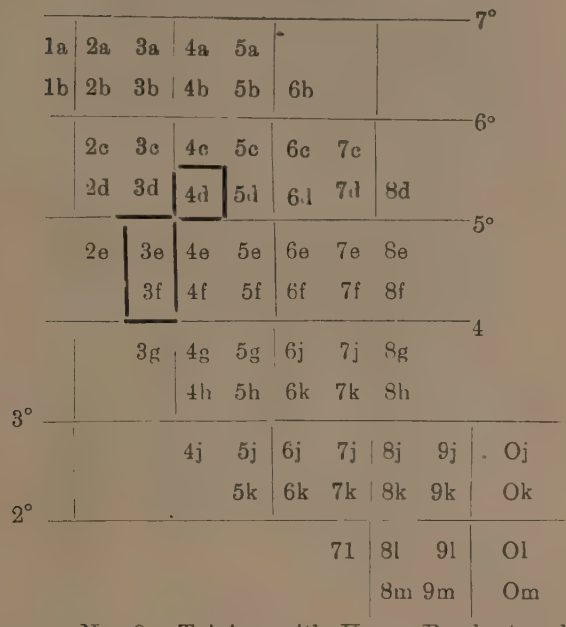


Diagram No. 8.—Taiping with Upper Perak, to which 11 species are confined. Upper Perak is chiefly contained in the square *4d*.

There are 11 species common the squares *3e* and *4d*—that is to say restricted to the Taiping area and the area immediately to the north-east of it. Of these *Antidesma gracillimum** and *Antidesma Kunstleri** are alike recorded for Maxwell's Hill and Gunong Inas, which is a high mountain of the Taiping range: two others, *Leea Curtisii*† *and Aerua Curtisii*† alike occur on the Waterloo Estate and at Lenggong: *Gomphandra nyssifolia,** *Didymocarpus urticaefolia** *and Piper longibractatum**—all found about the tops of the Taiping hills—were obtained by Mr. Ridley in Upper Perak on his visit to Temengoh the altitude of which is small, and *Zingiber chrysostachys** was got by Wray at 300 feet. The aroids *Homalomena trapezifolia* and *Schismatoglottis longifolia* occur on the Taiping hills both at high and at low elevations, and occur also at Temengoh. Whence in Upper Perak *Cinnamomum graciliflorum** came is uncertain. It is interesting that these few plants found high on the Taiping hills should be low down in upper Perak; but too little is the flora of square *4d* known for more to be said.

Two species are recorded as common to the three squares *2d, 3e* and *4d*, but not wider; one is the small tree *Pajanelia multijuga*†

which is conspicuous at the very foot of the Taiping hills. The other is *Costus Kingii*,† which likewise occurs on the lower slopes.

12. The relation of the Taiping Flora to that of the Main range of the Perak-Pahang border.

The Main range of the Perak-Pahang border is contained in the four squares *4e, 4f, 5e,* and *5f;* but botanically *5e* and *5f* are unknown; they are included in the area of the following diagram, but they carry no effect whatsoever.

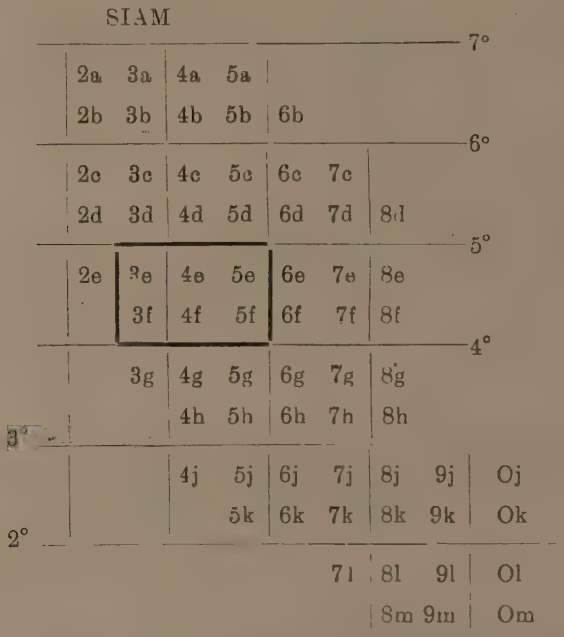


Diagram No. 9. The area of the Taiping hills and the montane area immediately to the eastward, with 49 species.

Common to *3e* and either *4e* or *4f* or both, but not at present known more widely are 49 species: 21 of them are found low down in the Taiping area, 18 of them high up, and 10 either occurring both below and above or of unknown elevation.

Those found low are:—

Hopea nervosa
Vatica Kunstleri
Garcinia opaca
Capparis larutensis
Millettia unifoliata
Eugenia perakensis
Melanochyla bracteata
Sonerila glabriflora
Medinilla scandens
Ardisia Kunstleri
Diospyros ellipsoidea
Paraboea capitata
Justicia ptychostoma
Beilschmeidia perakensis
Litsea hirsutissima
Breynia angustifolia
Cleistanthus Kingii
Ficus araneosa

Pasania Wrayi	Pothos macrocephalus
Rhaphidophora Kunstleri	

and those found high:—

Sonerila repens	Knema oblongifolia
Medinilla venusta	Bulbophyllum gigas
Schefflera lurida	Iguanura bicornis
Argostemma unifolioide	Iguanura ferruginea
Mycetia flava	Pandanus bidens
Didymocarpus alternans	Pandanus perakensis
Strobilanthes rufo-pauper	Arisaema anomalum
Aeschynanthus perakensis	Arisaema Wrayi
Piper Scortechinii	Gnetum Ridleyi

Beyond this area, to Penang, the following 8 species extend:— *Begonia Maxwelliana, Bassia Braceana,*† *Symplocos Curtisii, Cyrtandra dispar, Cinnamomum mollissimum,*† *Galearia subulata, Pasania grandifrons,* and *Oberonia rosea.** Unless it be *Oberonia rosea* no one of them occurs only above 3000 feet. The *Bassia* and the *Cinnamomum* belong to the hills below 2000 feet.

13. The relationship of the Taiping flora to that of the whole of the Main range, 118 species common to the two, or with 4d added, 126.

The area for comparison may be enlarged to comprise all the land within the heavy lines of the following diagram:—

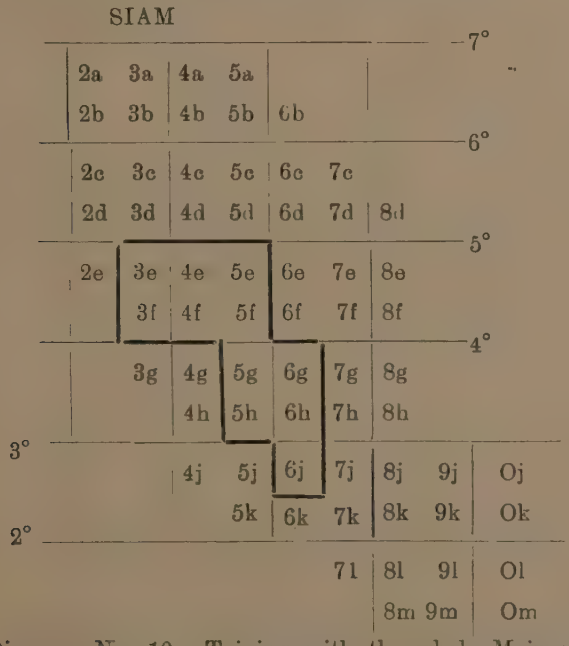


Diagram No. 10. Taiping with the whole Main range—a further 69 species, in addition to those of the northern part.

If the whole of the southern half of the Main range be added so that the area contains all the squares of diagram 10, and the species be assembled together which occur in it and the Taiping area, then we find the following 25 of them to occur at low elevations.

Cyathostemma Wrayi	Memecylon fruticosum
Goniothalamus Curtisii	Memecylon Kunstleri
Roydsia Scortechinii	Begonia taipingensis
Xanthophyllum bullatum	Diospyros subrhomboidea
Alsodeia Hookeriana	Diospyros toposiodes
Alsodeia pachycarpa	Jasminum Wrayi
Ternstroemia Scortechinii	Heterostemma piperifolium
Grewia erythrocarpa	Hoya citrina
Pentace Kunstleri	Boea paniculata
Dysoxylum rugulosum	Monophyllaea patens
Aglaia Kunstleri	Helicia Kingiana
Rhus perakensis	Calamus longispatha
Sonerila nidularia	Rhaphidophora crassifolia

while the following 33 of them are found high only:—

Aglaia cinerea	Lindera pipericarpa
Chisocheton macrothyrsus	Piper semangkoanum
Glyptopetalum quadrangulare	Piper magnibaccum
Sonerila integrifolia	Loranthus productus
Medinilla heterantha	Loranthus crassipetalus
Medinilla Scortechinii	Balanophora truncata
Eugenia corrugata	Dendrobium roseatum
Schefflera affinis	Eria bidens
Agapetes perakensis	Bulbophyllum oblanceolatum
Fagraea oblonga	Thelasis macrobulbon
Fagraea lanceolata	Hornstedtia grandis
Dischidia Scortechinii	Pinanga polymorpha
Lettsomia Curtisii	Calamus Curtisii
Torenia atropurpurea	Freycinetia montana
Didymocarpus sulphurea	Habenaria gigas
Didymocarpus parviflora	Carex perakensis
Nothaphoebe reticulata	

Intermediate between the two are *Dischidia cordifolia, Antistrophe caudata, Nothaphoebe fruticosa,* and *Musa truncata.* Extending into the two are *Cephaelis Ridleyi, Osmanthus Scortechinii, Didymocarpus albomarginatus, Didymocarpus malayanus, and Crytocarya Scortechinii.* And of unrecorded elevation are *Debregeasia squamata and Ficus obpyramidata.*

If the area be widened by the inclusion of the square *4d*, embracing Upper Perak, of high level plants are added *Diplospora Wrayi,* Didymocarpus hispida* and Staurogyne arcuata,** to low

level plants *Chirita caliginosa*,† *Ficus Lowii* and *Gastrochilus minor*, and to intermediate *Liparis comosa*, while *Diospyros* rigida has been found both high and low.

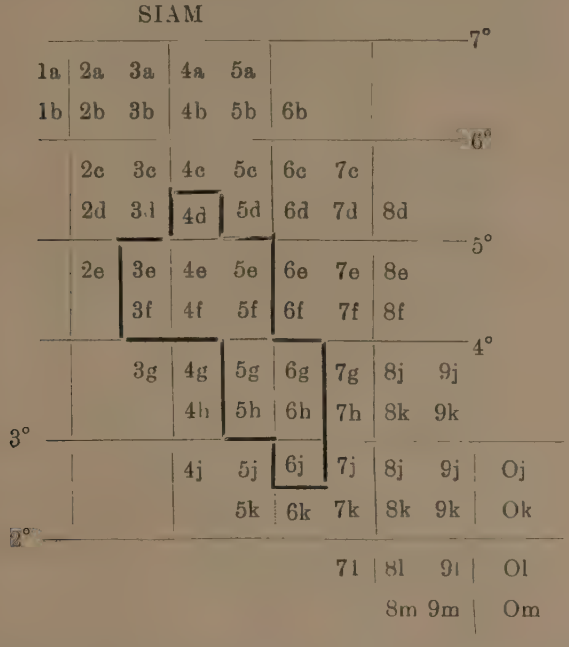

SIAM
7°
6°
5°
4°
3°
2°
1a 2a 3a 4a 5a
1b 2b 3b 4b 5b 6b
2c 3c 4c 5c 6c 7c
2d 3d 4d 5d 6d 7d 8d
2e 3e 4e 5e 6e 7e 8e
3f 4f 5f 6f 7f 8f
3g 4g 5g 6g 7g 8j 9j
4h 5h 6h 7h 8k 9k
4j 5j 6j 7j 8j 9j Oj
5k 6k 7k 8k 9k Ok
7l 8l 9l Ol
8m 9m Om

Diagram No. 11. Taiping, and the whole Main range with Upper Perak added, whereby 8 further species are included.

14. The relation of the Taiping Flora to the central mountains as a whole.

Proceeding, we next enlarge the area so as to contain Gunong Tahan and the north and south approaches to it: we include the square *4d* and so make the area to be as in the diagram on the next page.

Of them, the following 8 occur below 2000 feet in the Taiping hills:—

Artabotrys oxycarpus
Shorea Ridleyana
Combretum nigrescens
Vitis Scortechinii
Dissochaeta anomala
Ophiorrhiza pallidula
Baccaurea malayana
Hornstedtia triorgyale

and the following 13 occur high
Adinandra parvifolia
Gomphandra sp.

Sonerila brachyantha
Argostemma involucratum
Ardisia rosea
Dischidia astephana
Dendrobium longipes
Oberonia insectifera
Bulbophyllum galbinum
Eria ferox
Conamomum utriculosum
Dracaena robusta
Iguanura polymorpha

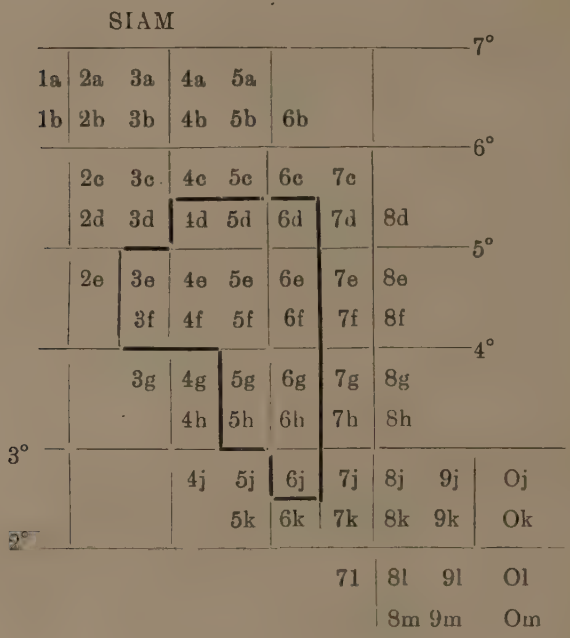


Diagram No. 12. The area of diagram 11 with Gunong Tahan added, producing the central montane area, whereby another 24 species are added.

15. Species of the central mountain area which appear to the north, but south of 7° N.

If the squares containing Penang (*2d*), Kedah Peak (*2c*) and Gunong Raya in Langkawi (*1b*) and all the land contiguous be added to the central montane area of diagram No. 12, species are

added to the number of 69, being 19 which do not pass to the south of the Main range and 49 which do so.

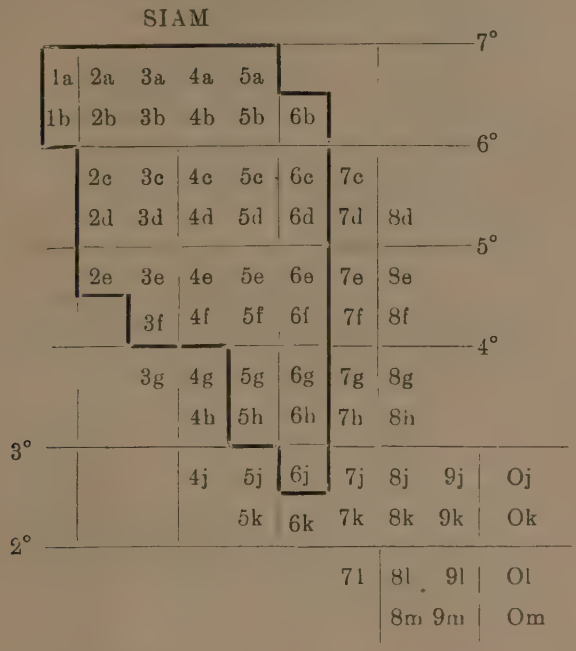


Diagram 13. The central montane area and northwards to 7° N.

Of the 17, *Streptocaulon Wallichii*,† *Phyllanthodendron dubium*,† *Glochidion perakense*,† *Ostodes muricata*† *Trichoglottis scaphigera*,† *Globba albiflora*† *and Curcuma Kunstleri*† are lowland;

Strobilanthes collinus,* *Strobilanthes rufo-pauper*,* *Piper penangense*,* *Bulbophyllum linearifolium*,* *Coelogyne pallens*,* *Podochilus lancifolia*,* and *Globba cernua** are montane. There is one not placeable.

of the 49 the following are lowland:—

Goniothalamus Scortechinii
Kadsura lanceolata
Shorea Maxwelliana
Pyrenaria Kunstleri
Kayea Kunstleri
Hydnocarpus nana
Cratoxylon Maingayi
Sterculia parvifolia
Tarretia perakensis
Evodia macrocarpa
Salacia Maingayi
Melanorrhoea aptera
Melanorrhoea Curtisii
Bauhinia ferruginea
Mussaenda Wrayi
Bassia laurifolia
Strychnos pencillata
Strobilanthes hirtisepalus
Cyrtandromoea megaphylla
Callicarpa angustifolia

Vitex siamica
Antidesma leucladon
Pasania Curtisii
Eria aporina

and the following montane:—

Brachytome Scortechinii
Diospyros Scortechinii
Jasminum Scortechinii
Loxocarpus coerulea
Strobilanthes Maingayi
Engelhardtia Wallichiana
Bulbophyllum selangorense
Ceratostylis cryptantha
Coelogyne carnea
Calanthe albolutea
Phreatia listrophora
Podochilus muricata
Protolirion paradoxum
Scindapsus Scortechinii
Rhaphidophora Wrayi

There are nine not placed.

16. Plants confined to the mountainous centre and north-west of the Peninsula (diagram 13) and Lower Siam.

Out of the 43 species which extend into Lower Siam without passing beyond the Isthmus of Kra, 12, being *Popowia nervifolia, Alsodeia Scortechinii, Schoutenia Kunstleri, Otophora sessilis, Rourea anomala, Brassaiopsis palmata,* Argostemma diversifolium,* Psychotria Birchiana, Didymocarpus flava,* Pseuderanthemum caudifolium, Conamomum citrinum,* and *Didymosperma Hookeriana* are restricted, upon the south of the 7th. degree North, to the area of the last diagram, the rest extending to Malacca or Singapore or the East coast. The *Brassaiopsis,* the *Argostemma* and the *Didymocarpus* are the only species found high on the Taiping hills: the others occurring low down.

17. Plants reaching Tenasserim and the Andaman islands but not extending further north.

Out of 25 species which extend into Tenasserim and the Andaman islands 11 do not pass south of the central montane region of the Peninsula and 14 do.

Adinandra villosa, Gomphostemma Scortechinii** and *Dendrochilum album** are montane in the Taiping hills, and do not reach the south of the Peninsula.

Adenia nicobarica, Ardisia andamanica,* Chilocarpus atroviridis** and *Staurogyne lasiobotrys** are montane and do extend into Malacca or Johore, but no one of them to Singapore.

18. Species of the Asiatic continent, chiefly Burma, which penetrate into Malaysia down the Peninsula without reaching the Malay islands.

As we have in the foregoing paragraphs 15—17 followed the range of species northwards to the limits of the Malaysian region, the species which northwards, and northwards only, transcede it may conveniently be considered next. There are 66 in the Taiping list:—

28 of them in the Peninsula pass into the central montane region, but not beyond it,
1 reaches Mount Ophir,
37 reach the lower country of Malacca, Johore and Singapore.

Out of these 66 the following are in the Taiping hills montane, *Illicium cambodianum, Salacia flavescens, Vitis Lawsoni, Microtropis filiformis, Eugenia Thumra, Hedyotis coronata, Psychotria calocarpa, Ardisia solanacea, Aeschynanthus Hildebrandtii, Loranthus obtectus, Loranthus pulcher, Ficus variolosa, Ficus chartacea, Elatostemma molle, Calanthe Fostermanni, Saccolabium bigibbum* and *Sphaerocaryum elegans.*

Are there southern migrants among them?—Probably, as for instance *Illicium cambodianum* and *Psychotria calocarpa* and some others. But until the plants of Tenasserim and particularly of Lower Siam are better known, a southward migration actually in progress must be obscure.

19. The relationship of Mount Ophir.

Recorded for Mount Ophir and the Taiping hills are 39 species: 17 of them occur also in Singapore island, and a further 8 in the lowlands of Johore; 7 occur in Malacca; while another is found upon the Pahang coast. None of these then, are exclusively montane in the south of the Peninsula. Among the remaining 6 are *Diplospora Kunstleri* which is recorded for the two places, and for no others, and 5, i.e. *Evodia pilulifera, Argostemma involucratum, Paraboea cordata, Liparis Maingayi,* and *Iguanura Wallichiana* which occur upon the Main range and seem to leap the lowlands to that isolated mountain. The *Liparis* and the *Paraboea* reach Kedah Peak: the *Liparis,* the *Paraboea,* the *Argostemma* and the *Eugenia* reach Penang. It is to be observed that three of these four are herbs.

20. The relationship of Malacca—which it will be remembered, is a well-worked area.

As limited to the Taiping area and square *6k*, which is that of Malacca, are 12 species. Except *Hoya Maingayi* (and the "Malacca" of its label probably means Mt. Ophir), all of them are lowland plants in the Taiping area. It may be convenient to future workers if we enumerate them: they are *Sterculia bicolor, Pentace eximia, Swintonia lurida, Mangifera Griffithii, Diospyros rufa, Cordyloblaste Maingayi, Beilschmiedia longipes, Baccaurea polyneura, Macaranga Maingayi* (Taiping elevation not recorded), *Castanopsis Ridleyi* and *Smilax Kingii.*

The total number of endemic species common to Malacca and Taiping is 230 and of them 38 are highland in the Taiping area and 130 are lowland. There are 62, either both high and low, or of unrecorded elevation.

Microchites furcata,† which occurs low down on the Taiping hills and in the square *4g*, and *Coelogyne Kingii* which occurs at unrecorded elevations in the Taiping hills and square *5j* are akin to these; and *Licuala pusilla*,† which adds the Main range and Gunong Tahan is, like those, with difficulty classifiable.

21. The relationship of Singapore—another well-worked area.

As common to Taiping and Singapore Island, but not recorded from any places between or any area elsewhere are 7 species, namely, *Artabotrys Wrayi, Genianthus Maingayi, Piper flavimarginatum, Beilschschmeidia Kunstleri, Baccaurea Hookeri, Baccaurea latifolia* and *Freycinetia confusa*: all these as far as recorded occur at low levels in the Taiping area.

The total number of endemic species common to Singapore and Taiping is 172; and of them 14 are highland in the Taiping area and 106 are lowland. There are 52 either both high and low, or of unrecorded elevation.

22. Further endemic Taiping plants in the south of the Peninsula.

In the south of the Peninsula there are further species to the number of 51 which occur at low elevation, is Johore, for instance without occurring either in the Malacca or Singapore squares: and of them 19 are highland, and 18 lowland, and 14 either both high and low or of unrecorded elevation.

The following two lists are, (i) of the endemic species montane in Taiping which appear in the low country of the south of the Peninsula, and (ii) of the endemic species in Taiping which equally appear in this low country.

(i)

Phaeanthus lucidus	Morinda elliptica
Aglaia Griffithii	Lasianthus ? glaberrimus
Eurycoma apiculata	Vaccinium perakense
Canarium parviflorum	Diospyros argentea
Celastrus malayensis	Ervatamia cylindrocarpa
Gomphandra lanceolata	Urceola brachysepala
Bauhinia cornifolia	Hoya Maingayi
Pyrenaria acuminata	Didymocarpus corchorifolia
Eugenia caudata	Justicia pubiflora
Barringtonia Scortechinii	Loranthus malaccensis
Phyllagathis hispida	Lepeostegeres Kingii
Sonerila bracteata	Breynia coronata
„ erecta	Castanopsis Wallichii
Schefflera Ridleyi	Microstylis acutangula
Argostemma elatostemma, var.	Dendrobium aegle
„ spinulosum	Bulbophyllum modestum
Ophiorrhiza discolor	Coelogyne longibractata
Hedyotis mollis	Coelogyne perakensis
Urophyllum ferrugineum	Eria monticola

Eria poculata
Hornstedtia albomarginata
Zingiber gracile
Alpinia petiolata
Phrynium hirtum
Musa malaccensis

Nenga macrocarpa
Caryota obtusa
Pinanga paradoxa
Daemonorops hygrophilus
Plectocomia ? Griffithii
Dendrocalamus giganteus

(ii)

Polyalthia Scortechinii
Tetracera lucida, var
Artabotrys crassifolius
„ Wrayi
Oxymitra latifolia
„ calycina
Orophea enterocarpa
Xylopia magna
Melodorum lanuginosum
„ Kingii
„ elegans
Uvariella leptopoda
Drepananthus pruniferus
Limacia oblonga
Dipterocarpus Kunstleri
Balanocarpus penangianus
„ Heimii
Hopea globosa
Garcinia penangiana
Kayea grandis
Calophyllum canum
Hibiscus floccosus
Pentace eximia
Sterculia bicolor
Tarrietia simplicifolia
Byttneria Maingayi
Grewia Miqueliana
Eleocarpus Hullettii
Xanthophyllum stipitatum
„ Wrayi
Alsodeia Wrayi
Gonostylus Maingayi
Evodia malayana
Turpinia latifolia
Canarium pilosum
Canarium rufum
„ kadondon
Santiria laxa
„ apiculata
„ fasciculata
„ Wrayi
Amoora rubiginosa
„ Ridleyi
Aglaia Hiemii

Lophopetalum pachyphyllum
Icicaster Planchoni
Lophophyxis Maingayi
Gomphandra corymbosa
„ penangiana
Iodes velutina
Strombosia rotundifolia
Phytocrene palmata
„ oblonga
Zizyphus Kunstleri
Nephelium rubescens
Pometia alnifolia
Lepisanthes longifolia
Paranephelium macrophyllum
Smythaea macrocarpa
Swintonia lurida
„ spicifera
Melanorrhoea torquata
Melanochyla angustifolia
Mangifera Griffithii
Vitis cinnamomea
„ elegans
Leea gigantea
Ellipanthus gibbosus
Rourea rugosa
Connaropsis macrophylla
Millettia albiflora
Crudia Curtisii
Saraca bijuga
Spatholobus Maingayi
Bauhinia Wrayi
Pithecolobium contortum
Eugenia papillosa
„ Clarkeana
„ chloroleuca
„ penangiana
„ pustulata
„ expansa
„ filiformis
„ subdecussata
„ variolosa
„ Duthieana
Phyllagathis Griffithii
Allomorphia exigua, var.

Memecylon acuminatum
„ amplexicaule
Crypteronia Griffithii
Casearia Kunstleri, var.
Homalium propinquum
Schefflera Hullettii
Greenia Jackii
Ixora Kingstoni
Mussaenda mutabilis
Timonius Wallichianus
„ Wrayi
Urophyllum villosum
Aulacodiscus premnoides
Sideroxylon malaccense
Diospyros bilocularis
„ flavicans
„ rufa
„ oblonga
Palaquium bancanum
„ Clarkeanum
„ Maingayi
Willughbeia coriacea
Leuconotis Griffithii
Cordyloblaste Maingayi
Chonemorpha penangensis
Ervatamia peduncularis
Erycibe malaccensis
„ festiva
Cyrtandra cupulata
Vitex longisepala
„ peralata
„ coriacea
Clerodendron myrmecophilum
„ deflexum
Thottea dependens
Piper Curtisii
„ ramipilum
Myristica cinnamomea
Horsfieldia Lehmannana
„ sucosa
Knema Wrayi
„ Kunstleri
„ Cantleyi
Actinodaphne pruinosa
Beilschmiedia longipes
„ Kunstleri
Nothaphoebe panduriformis
Stemmatodaphne perakensis
Cryptocarya rugulosa
Litsea machilifolia, var.
„ perakensis
„ megacarpa
„ castanea
Aporosa pseudo-ficilifolia
„ stellifera
Baccaurea Maingayi
„ latifolia
„ polyneura
„ Griffithii
Antidesma pendulum
Drypetes pendula
Glochidion desmocarpum
Endospermum malaccense
Agrostistachys sessilifolia
Croton Griffithii
Macaranga Lowii
Artocarpus Maingayi
Pasania Cantleyana
„ Wallichiana
Castanopsis megacarpa
„ nephelioides
„ Ridleyi
Saccolabium perpusillum
Dendrobium clavator
Hornstedtia macrochilus
Elettiaropsis latiflora
Amomum xanthophlebium
Smilax Kingii
Dracaena umbratica
Dioscorea stenomeriflora
Forrestia gracilis
Alocasia ovalifolia
Homalomena paludosa
Pandanus Ridleyi
„ ornatus
Freycinetia lucens
„ confusa
Calamus densiflorus
Gnetum Kingianum

23. East coast plants that also are endemic.

Of the Taiping plants 3 combine the East coast of Pahang with the area of diagram 10:—*Miquelia caudata,** *Symplocos perakensis,* and *Licuala malayana;** one combines the East coast of Pahang with the area of diagram 10 and the West coast:—*Polyalthia Hookeriana;** four combine the East coast of Pahang

with the area of diagram 7:—*Goniothalamus tenuifolius*, *Eugenia urophylla*†, *Ophiorrhiza tenella** and *Randia oocarpa*; and one combines the East coast of Pahang with the area of diagram 13:—*Ryparosa Scortechinii*†.

24. A summary in regard to endemic species.

In the following table the total number of endemic species of each area that has been considered are collected together. The first fact to notice is that in species common to the best-worked areas the endemism is high, reaching,

South of the Main range ..	46%
North of the Main range ..	40%
Penang	33%
Malacca	30%
Singapore	20%

but the order in which these five stand is not the order in which they might be arranged by the figures on the map opposite the first page of this bulletin, in which the Main range is regarded as but 20% known. It would follow then that as the Main range becomes better known, the number of the local endemics in the Taiping area will be reduced greatly by the discovery of them in it. Thus will the noteworthy peculiarity of the area be reduced.

Number of endemic species.

Area	Taiping	reach Penang	reach Lankawi or Kedah peak	enter upper Perak	reach N. part of Main range	do. S. part	reach N. Pahang mountains	extend towards 7° N.	into Lower Siam	into Tenasserim	occur in Malacca	in E. Pahang	in Johor	in Singapore
squares 3e and 3f	196	..	..	..	..	..	..	..	..	..	..	..	..	..
diagram 6	34	34	..	..	..	..	..	..	..	..	..	..	..	..
diagram 7	5	3	5	..	..	..	..	..	..	..	..	..	..	..
diagram 8	11	..	..	11	..	..	..	..	..	..	..	..	..	..
under same	2	2	..	2	..	..	..	..	..	..	..	..	..	..
diagram 9	49	..	..	..	49	..	..	..	..	..	..	..	..	..
under same	8	8	..	..	8	..	..	..	..	..	..	..	..	..
diagram 10	69	..	..	..	37	69	..	..	..	..	..	..	..	..
diagram 11	8	..	..	8	8	8	..	..	..	..	..	..	..	..
diagram 12	24	..	..	1	17	17	24	..	..	..	..	..	..	..
diagram 13	68	42	22	6	31	52	67	68	..	..	..	..	..	..
to Lower Siam	43	19	15	11	25	27	16	8	43	..	22	13	20	17
to Tenasserim	25	13	9	7	13	18	12	2	3	25	8	4	8	6
N. to S. of Peninsula	329	165	43	36	162	209	65	12	..	..	233	42	156	172
Total	871	286	94	82	350	400	184	90	46	25	263	59	184	195
Percentage	..	33	11	9	40	46	21	10	51	3	30	7	21	22

Number of Montane endemic species.

Area	Taiping	reach Penang	reach Lankawi or Kedah peak	enter upper Perak	reach N. part of Main range	do. S. part	reach N. Pahang mountains	extend towards 7° N	into Lower Siam	into Tenasserim	occur in Malacca	in E. Pahang	in Johor	in Singapore
squares 3e and 3f	50	..	..	..	..	..	..	..	..	..	..	..	..	..
diagram 6	3	3	..	..	..	..	..	..	..	..	..	..	..	..
diagram 7	2	2	2	..	..	..	..	..	..	..	..	..	..	..
diagram 8	7	..	..	7	..	..	..	..	..	..	..	..	..	..
under same	0	0	..	0	..	..	..	..	..	..	..	..	..	..
diagram 9	18	..	..	..	18	..	..	..	..	..	..	..	..	..
under same	1	1	..	..	1	..	..	..	..	..	..	..	..	..
diagram 10	33	..	..	..	17	33	..	..	..	..	..	..	..	..
diagram 11	3	..	..	3	3	3	..	..	..	..	..	..	..	..
diagram 12	13	..	..	..	8	7	13	..	..	..	..	..	..	..
diagram 13	22	11	11	2	16	18	21	22	..	..	..	..	..	..
to Lower Siam	6	2	3	3	5	4	4	4	6	..	3	3	2	1
to Tenasserim	7	3	2	1	3	6	4	1	2	7	1	1	4	1
N. to S. of Peninsula	53	29	12	4	30	43	19	4	..	..	38	7	35	14
Total	218	51	30	20	101	114	61	31	8	7	42	11	41	16
Percentage	..	23	14	9	46	52	28	14	4	3	19	5	18	7
Above average by	..	3	..	6	6	7	4	..	..	..	..	..	..	..
Below average by	10	..	..	..	..	..	..	..	1	..	11	2	3	15

Conversely it is clear that there has been a development of endemism on no small scale within what is here called the central montane area of the Peninsula (diagram 12), Taiping sharing in it.

We have endeavoured to recognise this montane flora by the endemism it possesses and we have found endemic species in all the following genera, the list of which is given to call attention to the circumstance that they are genera typical of Malaysia and that it is quite unnecessary to suppose any marked wandering in of made species of these genera from more northern regions: but that to account for the development of these endemics we have but to assume evolutionary processes in the Peninsula. In which connection it may be asserted that whatever the ages of the mountains of the central montane area of the Peninsula be, they are old enough to be several times over the foster-parents of these endemics.

That the species evolved within the central montane area is to be assumed: but the question of the part the Taiping hills may have played in their origin is not yet worth discussing.

This montane flora scarcely reaches Penang, to which the lesser elevations and the greater periods of heat scarcely invite it. It is remarkable in these figures that the species of narrow distribution common to Taiping and Penang are members rather of the Larut flora.

Genera supplying the montane Taiping endemics, with the number of species in brackets of more than one

Adinandra (2)
Gordonia
Impatiens
Megaphyllaea
Chisocheton
Dysoxylon
Aglaia
Gomphandra (2)
Glyptopetalum
Roureopsis
Polyosma
Eugenia
Osbeckia
Melastoma
Oxyspora
Campimia
Sonerila (3)
Medinilla (3)
Schefflera (2)
Brassaiopsis
Argostemma (3)
Mycetia
Gardenia
Diplospora
Psychotria
Lasianthus
Amaracarpus
Agapetes
Ardisia
Antistrophe
Symplocos
Cleghornia
Micrechites
Toxocarpus
Genianthus
Dischidia (3)
Fagraea (2)
Gaertnera
Lettsomia (2)
Torenia
Aeschynanthus
Didissandra
Didmocarpus (6)
Chirita
Staurogyne (2)
Strobilanthes (3)
Justicia
Premna
Gomphostemma
Piper (5)
Knema
Beilschmiedia (2)
Cinnamomum (2)
Nothaphoebe
Machilus
Actinodaphne
Litsea
Lindera
Loranthus
Balanophora
Antidesma
Daphniphyllum
Ficus
Pasania
Oberonia (2)
Liparis (3)
Dendrobium (3)
Bulbophyllum (5)
Eria
Trichotosia
Ceratostylis
Coelogyne
Podochilus
Thelasis
Anoectochilus (2)
Goodyera
Habenaria
Globba (2)
Zingiber
Hornstedtia
Geostachys
Curculigo
Dracaena
Pinanga
Iguanura
Daemonorops
Calamus (2)
Pandanus (2)
Freycinetia
Arisaema (3)
Carex
Gnetum

Number of Lowland endemic species.

Area	Taiping	reach Penang	reach Lankawi or Kedah peak	enter upper Perak	reach N. part of Main range	do. S. part	reach N. Pahang mountains	extend towards 7 N.	into Lower Siam	into Tenasserim	occur in Malacca	in E. Pahang	in Johor	in Singapore
squares 3e and 3f	91	..	..	..	..	..	..	..	..	..	..	..	..	..
diagram 6	22	22	..	..	..	..	..	..	..	..	..	..	..	..
diagram 7	1	1	1	..	..	..	..	..	..	..	..	..	..	..
diagram 8	4	..	..	4	..	..	..	..	..	..	..	..	..	..
under same	2	2	..	2	..	..	..	..	..	..	..	..	..	..
diagram 9	21	..	..	..	21	..	..	..	..	..	..	..	..	..
under same	2	2	..	..	2	..	..	..	..	..	..	..	..	..
diagram 10	25	..	..	..	14	25	..	..	..	..	..	..	..	..
diagram 11	0	..	..	0	0	0	..	..	..	..	..	..	..	..
diagram 12	8	..	..	0	4	7	8	..	..	..	..	..	..	..
diagram 13	33	23	9	3	15	22	32	33	..	..	..	..	..	..
to Lower Siam	23	11	9	6	11	14	7	2	23	..	9	8	9	10
to Tenasserim	11	7	3	2	6	6	4	..	1	11	4	2	3	3
N. to S. of Peninsula	178	88	25	20	83	102	22	5	..	..	132	20	71	106
Total	421	156	47	37	156	176	73	40	24	11	145	30	83	119
Percentage	..	37	11	9	37	42	17	10	6	3	34	7	20	28
Above average		4	..	..	..	..	..	..	..	..	4	..	1	6
Below average		..	..	..	3	4	4	..	1	..	..	..	..	..

It looks as if between the Taiping hills and Moulmein changes proceed evenly, as might be expected in the lowlands. For, adding to the 68 endemic species which pass as in diagram 13 northwards to 7° N. to the 34 for the Taiping with Penang endemics, 5 for the Taiping with Kedah endemics, and so on, we get:—

	Total	Lowland	Montane
Endemics ending northwards in Tenasserim	25	11	7
„ „ „ „ Lower Siam	43	23	6
„ „ „ before 7° N.	107	56	27

but more work is required yet everywhere, but chiefly in Lower Siam, where hills are small and also botanically scarcely known.

25. The plants of Malaysia which are not endemic.

The next sections deal with Malaysian plants which are not confined to the Peninsula, but have overmastered sea-barriers: and first with these of narrow distribution with the Peninsula.

26. Malaysian plants, but in the Peninsula local.

In the Taiping area 32 species have been collected, which while they have been found nowhere else in the Peninsula, are known to occur in the western Malaysian islands:—

Sumatra only:—*Uvaria Larep*,† *Sabia sumatrana*,† *Eugenia Benjamina*, *Eugenia Hullettiana*,† *Eugenia subhorizontalis*,† *Piper velutinervium*,† and *Cinnamomum lampongum*.†

Java only:—*Padebruggea dasyphylla*,† *Piper acre*, *Litsea brachystachya*,† *Chrysoglossum villosum*, *Diglyphosa latifolia*, *Chelonistele pusilla*,* and *Physurus latifolius*.*

Sumatra and Java together:—*Stephania corymbosa*,* *Payena dasyphylla*,* and *Strobilanthes bibracteatus*.*

Borneo only:—*Melanorrhoea macrocarpa*,* *Platyclinis sarawakensis*, *Dendrobium Derryi*, *Bulbophyllum cleistogamum*, *Arundina revoluta*,† *Coelogyne quadrangularis*,* *Bromheadia brevifolia*, and *Bagnisia crocea*.

Sumatra and Borneo together:—*Saraca macroptera*, *Maesa macrothyrsa*,† and *Litsea fenestrata*.†

Java and Borneo together:—*Wightia borneensis*.*

Sumatra, Java and Borneo together:—*Henslowia Reinwardtiana*,† *Pasania Blumeana*,* and *Castanopsis costata*.

The species marked† are recorded only from low elevations; those marked* for high.

27. Malaysian plants which in the Peninsula are found in Taiping and Penang.

Another 11 which are found in the island of Western Malaysia, in the Peninsula appear confined to Taiping and Penang.

They are:—

Sumatra only:—*Saraca palembanica*† and *Trichospermum cymbiforme*.†

Java only:—*Melodorum latifolium*,† and *Platea latifolia*.†

Borneo only:—*Magnolia Maingayi*,* *Dipterocarpus fagineus*,† *Balanocarpus Curtisii*,† *Astronia smilacifolia*.† and *Korthalsia ferox*.

Sumatra and Borneo together:—*Anplectrum pallens*.†

Java and Borneo together:—*Dalbergia phyllanthoides*† and *Litsea cylindrocarpa*.†

28. Malaysian plants which in the Peninsula occur in the central mountain area.

There are 3 species which occur in the squares 3e and 4d, namely *Leea simplicifolia*, *Aporosa arborea*, and *Rafflesia Hasseltii*; the first and second both in Sumatra and in Java; the third in Sumatra only; and no one of them clearly montane in the Taiping hills.

There are 46 occupying the area of diagram 12:—

Sumatra only:—*Ryparosa Kunstleri*, *Aglaia membranifolia*,† *Eugenia garciniaefolia*,† *Oxyspora stellulata*, *Jasminum insigne*,† *Cinnamomum rhyncophyllum*†, *Pasania Eichleri*,† *Limatodis pallidus*,* and *Eria pilifera*.*

Java only:—*Saurauia nudiflora*,* *Saurauia cauliflora*,† *Canarium denticulatum*, *Passiflora Horsfieldii*,† *Lasianthus gracilis*, *Litsea angulata*,* *Lindera bibracteata*,* *Platyclinis gracilis*,* *Microstylis perakensis*, *Sarcopodium macropodum*,* *Dendrobium tetrodon*, *Collabium nebulosum*.*

Sumatra and Java together:—*Didymocarpus reptans*, *Schefflera scandens*, *Litsea Noronhae*,† *Phaius callosus*,* *Dicerostylis lanceolata*.*

In Borneo only:—*Lucinaea Ridleyi*, *Randia impressinervia*,† *Clerodendron Ridleyi*, *Gomphostemma microcalyx*,† *Lepeostegeres Beccarii*,* *Dendrochilum Kingii*, *Bulbophyllum catenarium*,* *Thecostele secunda*,† *Musa violascens*,† *Joinvillea malayana*,* *Pandanus stelliger*,* and *Alocasia Beccarii*.*

In Sumatra and Borneo together:—*Dapania scandens*,* *Cryptocarya crassinervia*,† *Eria longifolia* and *Pothos Barberianus*.*

In Java and Borneo together:—*Aralia ferox*, *Lindera caesia*,* and *Liparis latifolia*.*

In Sumatra, Java and Borneo together:—*Agalmyla staminea*.

29. Western Malaysian plants wide in the Peninsula.

Wider than these in the Peninsula and common to islands in Western Malaysia are:—

63 species in Sumatra only.
33 „ in Java only.
29 „ in Sumatra and Java together.
95 „ in Borneo only.
65 „ in Sumatra and Borneo together.
26 „ in Java and Borneo together.
60 „ in all three.

No useful purpose will be served by naming them. Their total is 371.

A further 12 species reach in addition Lower Siam. Two of them occur in it, the Peninsula and Sumatra, and two in Java: four of them occur in it, the Peninsula and Borneo: one is in both Sumatra and Java; two in Sumatra and Borneo together, and one in Java and Borneo together.

A count at this point shows that Borneo is known to possess 296 of these Western Malaysian plants that are in the Taiping hills, that Sumatra has 262 and Java, in spite of the much greater extent to which it has been botanised, has only 193.

30. The seas as barriers.

What means, we must ask, have the plants with which the last section deals had of crossing the seas which separate the Peninsula from the islands. There exists always the success of the random shot, e.g. the chance dispersal by a migrating bird or other means. Again it is generally believed that the bottom of the seas was bared about the south of the Peninsula at one or several times, and possibly in diverse manner in different times, so that for instance the forests of the Peninsula could stretch into Sumatra, and vice versa. From this we argue that when such a making bare of the sea-bottom has occurred, then the plants living in the south of the Peninsula at such a time or times, had greater facilities for transmigration than those in the north, and therefore the south has been likely to receive more species from other parts of the Malaysia than the north and also to give more: and evidence of this taking and giving ought to be obtainable. We find evidence in bringing the results of sections 22, 24 and 28 together in this section 30.

In sections 26-29 we have dealt with 475 plants of Malaysia which pass the seas. Of them 272 are in the Taiping area—lowland plants which reach the lowlands of the south of the Peninsula; 71 are also lowland plants in the Taiping area but do not reach (as far as we know them) the lowlands of the south of the Peninsula: 71 are montane plants in the Taiping area which descend to the lowlands in the south of the Peninsula; and 51 are montane plants in the Taiping area which do not descend. In section 24 we have summed up the total lowland plants of the Taiping area which are confined to the Peninsula as 421, and the montane plants as 218. In section 22 we have listed 178 lowland plants which reach the lowlands of the south of the Peninsula and 50 montane plants which do.

From these figures it is calculable that the chances of getting astride the seas for the lowland Taiping plants have been:—

60 per cent if they exist in the south of the Peninsula, 22 per cent if they do not;

and of the montane plants:—

55 per cent if they exist in the south of the Peninsula, 21 per cent if they do not.

The similarity of these figures is remarkable, and the support that they give to the supposition of land connections is distinct, or at any rate as distinct as is possible with such limited numbers.

In this Bulletin (Burkill and Holttum, A botanic reconnaissance on the Main Range at Fraser Hill, vol. 3 1923, p. 31) attention was directed to the way in which montane species upon the Perak-Pahang mountains descend to low levels in the south of the Peninsula and that among such as descend most of those among them as reappear in the Malay islands are found.

31. Plants of Tenasserim or the Andamans or the Nicobars extending into the Malay islands.

There are 39 species in the list which occur mostly in Tenasserim, some also in the Andamans, and a few in the Nicobars: and are found also in the islands of western Malaysia.

The most interesting of them is *Ilex glomerata*,* a species of Tenasserim and Java, with Taiping as its only station in the Malay Peninsula.

*Rhynchoglossum obliquum** and *Thecostele Zollingeri* are in but Penang and Taiping: and *Liparis lacerata** is but in Langkawi and Taiping and the Dindings.

Procris latifolia, which occurs from the Nicobars to Samoa is in the Peninsula one of the Central Montane type.

The remaining 34 reach the lowlands of the south of the Peninsula.

32. Plants of the continent of Asia, which extend into the Malay islands.

Lastly there are in the list 363 species, which are found in Burma or Siam, and also in the islands of western Malaysia, some few of them found as far northwards as the Himalaya and southern China, and some few of them found quite to the easternmost parts of Malaysia: some even wider.

In § 18 we have called attention to 66 species of the Asiatic continent north of Moulmein, found in Taiping and mostly else-

where in the Peninsula, but not in the Malay islands. It is seen that 85 per cent of the plants wide enough to live in Burma etc., and Taiping at the same time have enjoyed facilities, including pioneering constitutions, that have enabled them to get and keep, or keep at any rate, a place in the Malay islands.

The Taiping flora is at present a very interesting one to the Phytogeographer.

Abbreviations, chiefly of collectors names, used in this list.

Scort. -	B. Scortechinii	Kunstl. -	H. Kunstler
Curt. -	C. Curtis	Ridl. -	H. N. Ridley
H. & N. -	Mohamed Haniff and Mohamed Nur	B. & H. -	I. H. Burkill and Mohamed Haniff.
Hend. -	M. R. Henderson	Anders. -	J. W. Anderson
flr. -	flower		

The names of the months are abbreviated also, and the symbol ′ is used to indicate feet.

RANUNCULACEAE.

Naravelia laurifolia, *Wall.* At 200′, Wray 2687; flr. July. A wide climber of Indo-Malaya to the Philippines; in Peninsula 5c, 2d, 4d, 6f, 5g, 6g, 8g.

DILLENIACEAE.

Delima sarmentosa, *Linn.* Up to 4100′, Wray 1893, Ridl. 5353; flr. May, June. A climber of Indo-Malaya and China; in Peninsula common.

Tetracera assa, DC. At 100′, Wray 2306; flr. and fruit July. A slender climber of Siam, Indo-China and Java; in Peninsula common.

Tetracera lucida, *Wall.,* var. lanuginosa, *Ridl.* Up to 200′, Kunstl. 5579; flr. Feb. A woody climber, endemic, 3f, 6k, Johore, 9m, the var. at 3e only.

Tetracera macrophylla, *Wall.* 100-300′, Kunstl. 3388, 7564; flr. May, Sept. A climber of Sumatra; in Peninsula common.

Acrotrema costatum, *Jack.* At 300′, Wray 1380; flr. April. A herb of Borneo; in Peninsula Langkawi to Johore except in Malacca.

Wormia oblonga, *Wall.* Taiping, Derry 6257; flr. Sept. A tree up to 40′, of Sumatra; in Peninsula Kedah to Malacca.

Wormia pulchella, *Jack.* Taiping (in the Public Gardens), Curt. 1379; flr. Oct. A tree up to 40′, of Sumatra and Borneo; in Peninsula 3f, 6g, 8g, 5h, 6k, 9m.

Wormia subsessilis, *Miq.* At Taiping, Hend. 10358; flr. Jan. A large shrub of W. Malaysia; in Peninsula common.

Dillenia indica, *Linn.* At 200′, Hend. 10309; fruit Aug. A small tree of Indo-Malaya; in Peninsula 2d, 4d, 6k, 9m.

MAGNOLIACEAE.

Magnolia Maingayi, *King.* 4000-4500′, Ridl., B. & H. 12962; flr. March. A shrub or tree of Borneo; in Peninsula 2d, 4f.

Manglietia glauca, *Bl.* Forest Dept. 498; flr. May. A lofty tree of Indo-Malaya; in Peninsula 2c, 2d.

Michelia montana, *Bl.* At about 4000′, Wray 4038; flr. April. A small tree of Himalaya and Java; in Peninsula 2c, 4f.

Talauma Kunstleri, *King.* 2500-4000′, Wray 2826, Kunstl. 6383; flr. July. A tree up to 30′, endemic, 2c.

Talauma lanigera, *Hook. fil.* Larut, Kunstl., fide Ridl. A tree of about 20′, endemic, 2d, 7j, 6k.

WINTERACEAE.

Illicium cambodianum, *Hance.* From 2000′ upwards, all collectors; flr. Feb., March, May, fruit March. A shrub or small tree of Cambodia; in Peninsula Kedah Peak, G. Tahan, the Main Range, and Mt. Ophir.

SCHIZANDRACEAE.

Kadsura lanceolata, *King.* 500-1000′, Kunstl., fide Ridl. A small climber, endemic, 2d, 4f, 5g.

Kadsura scandens, *Bl.* Wray 2313. A liane of W. Malaysia to the Philippines; in Peninsula common at low altitudes.

ANONACEAE.

Griffithia cupularis, *King.* 800-1500′, Kunstl. 6643; fruit Sept. A shrub or tree, endemic and local.

Cyathostemma Hookeri, *King.* 300-800′, Kunstl. 6482; fruit Aug. A liane of Bangka and Borneo; in Peninsula 2d, 9m.

Cyathostemma Wrayi, *King.* At 300′, Kunstl. 4207; flr. May. A liane, endemic, 4f, 5h.

Uvaria hirsuta, *Jack.* 300-800′, Kunstl. 3890, 5920; fruit Feb., April. A slender climber of Indo-Malaya; in Peninsula 2d, 3f, 4h, 5h, 6j, 6k, 0k, 9m.

Uvaria Larep, *Miq.* 300-500′, Kunstl. 4011, Ridl. 11916; flr. Feb., March. A liane of Sumatra; in Peninsula 3e only.

Uvaria micrantha, *Hook. fil. and Th.* At 2000′, Ridl. 2984. A liane of Indo-Malaya to the Philippines; in Peninsula 1b, 2d, 6f, 6k.

Uvariella leptopoda, *Ridl.* Up to 300′, Kunstl., fide Ridl. A liane, endemic, 0m.

Cyathocalyx Maingayi, *Hook. fil.* Larut, Kunstl., fide Ridl. A tree up to 60′, endemic, 2d, 6k.

Cyathocalyx virgatus, *King.* Larut, Kunstl., fide Ridl. A tree up to 60′, of Java; in Peninsula 2d, 6k, 9m.

Drepananthus pruniferus, *Maing.* Larut, Kunstl., fide Ridl. A tree up to 50′, endemic, 2d, 4f, 8g, 6k.

Artabotrys crassifolius, *Hook. fil.* At 500′, Haniff 13202; flr. March. A liane of Burma; in Peninsula 6k, 9m.

Artabotrys gracilis, *King.* 300-1000′, Kunstl. 3746, 4987; flr. Oct., fruit Jan. A slender climber of Borneo ; in Peninsula 3d, 5g, 5h, 9l.

Artabotrys oxycarpus, *King.* 500-1000′, Kunstl., fide Ridl. A liane, endemic, 6d.

Artabotrys suaveolens, *Bl.* At 2000′, Ridl. A liane of Indo-Malaya to the Philippines; in Peninsula common.

Artabotrys venustus, *King.* 100-4000′, all collectors; flr. Feb., March, Aug., Sept., fruit Jan., Sept. A liane of Siam; in Peninsula 4f, 5g.

Artabotrys Wrayi, *King.* At 300′, Wray 2663, 4006; flr. July, fruit March. A liane, endemic, 9m.

Desmos chinensis, *Lour.* At Waterloo, 1800′, Curt. 2705, 2717; flr. and fruit May. A tree or climber of Indo-Malaya and China; in Peninsula common.

Desmos cochinchinensis, *Lour.* 100-300′, Kunstl. 4182; flr. April. A slender climber of Indo-Malaya and China; in Peninsula 2b, 4b, 6c, 2d, 5h, 6h, 6k.

Desmos dasymaschala, *Saff.* At 300′, Wray, Kunstl. 4877; flr. Sept. A shrub of Burma to Java; in Peninsula common.

Desmos dumosa, *Saff.* 500-800′, Kunstl. 5520; fruit Feb. A liane of Assam and Siam; in Peninsula 2d, 3f, 6k, 9m.

Desmos filipes, *Ridl.* 2500-3500′, Wray 609, Kunstl. 2712, 5291, H. & N. 2500; fruit Dec.-Feb. A small tree, endemic, 6b, 6h.

Polyalthia asteriella, *Ridl.* Taiping Hill, Ridl. (not seen). A tree, endemic and local.

Polyalthia canangioides, *Boerl.* Wray 2075? A small tree of W. Malaysia; in Peninsula 6k.

Polyalthia dumosa, *King.* At 1200′, Wray 2628, 2978. A shrub, endemic and local.

Polyalthia glomerata, *King.* 2800-3000′, Kunstl., fide Ridl. A tree up to 50′, of Lower Siam and Sumatra; in Peninsula 3e only.

Polyalthia Hookeriana, *King.* At about 2500′, Ridl. 2985; flr. Feb. A tree up to 70′, endemic, 4f, 4h, 5h, 7h.

Polyalthia hypogaea, *King.* Taiping Hills, Kunstl., fide Ridl. A small tree, endemic, 4f.

Polyalthia hypoleuca, *Hook. fil.* Up to 300′, Kunstl. 5310; fruit Dec. A tree of Borneo; in Peninsula 2d, 4h, 6j, 6k, 9m.

Polyalthia laterifolia, *King.* Larut, Kunstl., fide Ridl. A tree up to 70′, of Java; in Peninsula 4f, 9m.

Polyalthia macrantha, *King.* Larut, Kunstl., fide Ridl. A tree up to 70′, endemic and local.

Polyalthia macropoda, *King.* Wray 2075? A tree up to 60′, endemic, 2d, 4e, 4f, 8l, 9m.

Polyalthia oblonga, *King.* 2500-3000′, Wray 2805, Curt. 1281, 2703; flr. May, Dec. A small tree of Borneo; in Peninsula 2d, 9k, 9l.

Polyalthia pachyphylla, *King.* 300-500′, Kunstl. 7516; fruit April. A tree up to 100′, endemic and local.

Polyalthia Scortechinii, *King.* Larut, Kunstl., fide Ridl. A small tree, endemic, 1b, 4f, 6g, 5h, 5k, 9l, 9m.

Polyalthia sumatrana, *King.* Larut, Kunstl., fide Ridl. A tree up to 60′, of Sumatra and Borneo; in Peninsula 4f, 6g, 5h, 9m.

Anaxagorea Scortechinii, *King.* At Waterloo, Curt.; fruit May. A bush or small tree of Lower Siam; in Peninsula common.

Goniothalamus Curtisii, *King.* At Waterloo, Curt. 2706; flr. May. A shrub or small tree, endemic, 5g, 5h.

Goniothalamus macrophyllus, *Hook. fil.* Up to 3000′, Wray 2987, Curt. 2706, Ridl. 5377, H. & N. 2351; flr. Feb., May, June. A shrub or small tree of W. Malaysia; in Peninsula common.

Goniothalamus Ridleyi, *King.* At Batu Kurau, Curt. 2893; flr. Oct. A tree up to about 20′, of Borneo; in Peninsula 4d, 3f, 4f, 8g, 6k, 9m.

Goniothalamus Scortechinii, *King.* Taiping, Kunstl., fide Ridl. A shrub or small tree, endemic, 2d, 4d, 4e, 5f, 5h.

Goniothalamus tapis, *Miq.* Larut, Kunstl., fide Ridl. A shrub or small tree of Sumatra and Borneo; in Peninsula 2d, 6k, 7k, 9m.

Goniothalamus tenuifolius, *King.* 2000-3000′, Ridl. (not seen). A bush or small tree, endemic, 2c, 4d, 3f, 4f, 8g, 5h.

Orophea dodecandra, *Miq.* 300-500′, Kunstl. 7386; flr. March. A tree up to 50′, of Borneo; in Peninsula common.

Orophea enterocarpa, *Maing.* 300-800′, Kunstl. 7642, 7695; flr. April, fruit June. A tree up to 30′, endemic, 6g, 7j, 6k.

Orophea hastata, *King.* Larut, Kunstl., fide Ridl. A small tree, endemic, 4d, 3f, 5g, 9m.

Mitrephora macrophylla, *Oliv.* 500-2500′, Wray 2942, Curt. 1279, Ridl. 2985, 5377; flr. Feb., June, Dec. A small tree, endemic, 2d, 4d, 6e, 3f, 4f, 4g, 5h.

Mitrephora Maingayi, *Hook. fil.* 300-1000′, Kunstl. 5242, 7547, 7743; flr. June, Dec., fruit April. A tree up to 50′, of Siam, Indo-China, and Borneo; in Peninsula 2d, 4d, 5h, 6k.

Mitrephora reticulata, *Hook. fil.* At about 4000′, Wray, Anders. 128, B. & H. 13023; flr. and fruit March. A tree up to 30′, of Indo-Malaya; in Peninsula common.

Popowia nervifolia, *Maing.* Taiping Hills, fide Ridl. A small tree of Lower Siam; in Peninsula 2d, 4d, 4f, 6f, 5h.

Popowia perakensis, *King.* 2000-4000′, Wray 2055, 2825, 3233, Curt. 1990; flr. Sept., fruit June. A small tree, endemic and local.

Popowia ramosissima, *Hook. fil. & Th.* 800-2000′, Kunstl. 7743, Curt. 1994, Anders. 98, H. & N. 2390; flr. June, Sept., fruit Feb. A small tree of W. Malaysia to Philippines; in Peninsula common.

Oxymitra affinis, *Hook. fil. & Th.* 500-800′, Kunstl. 5126; fruit Nov.. A climber of Lower Siam; in Peninsula 6k, 7l, 9m.

Oxymitra biglandulosa, *Scheff.* Wray 2082; fruit June. A climber of W. Malaysia; in Peninsula 4f, 5h, 6k, 9m.

Oxymitra calycina, *King.* 500-800′, Kunstl. 6780; flr. Oct. A climber, endemic, 1b, 2b, 2d, 4e, 9m.

Oxymitra latifolia, *Hook. fil. & Th.* 800-1000′, Kunstl. 6879; fruit Nov. A climber, endemic and common.

Melodorum elegans, *Hook. fil. & Th.* 300-500′, Wray 1823, Kunstl. 3324; flr. April, Sept., fruit April. A slender climber, endemic, 2d, 5h, 6k, 9l, 9m.

Melodorum fulgens, *Hook. fil.* 100-4000′, Wray 2441, H. & N. 2317; flr. Feb., fruit July. A climber of Borneo; in Peninsula 4f, 6g, 5h, 6k, 9m.

Melodorum Kingii, *Boerl.* 300-500′, Wray 1965, Kunstl. 5344; flr. Dec., fruit May. A liane, endemic, 5h, 6k.

Melodorum lanuginosum, *Hook. fil. & Th.* 300-500′, Wray 2568, Kunstl. 5312; flr. Dec., fruit July. A liane, endemic, 1b, 2d, 3f, 6j, 6k, 9m.

Melodorum latifolium, *Hook. fil. & Th.* 500-2500′, Wray 3224, Kunstl. 6293. A liane of W. Malaysia; in Peninsula 2d, 4f.

Melodorum litsaefolium, *King.* 300-800′, Kunstl. 4986; flr. Oct. A liane, endemic and local.

Melodorum manubriatum, *Hook. fil. & Th.* Wray 2085, 2640; flr. June, fruit June, Aug. A liane of Tenasserim, Bangka and Borneo; in Peninsula common.

Melodorum pisocarpum, *Hook. fil. & Th.* At 200′, Wray 2149; fruit June. A climber of Sumatra; in Peninsula 2d, 5j, 6k, 9m.

Melodorum prismaticum, *Hook. fil. & Th.* 100-500′, Wray 2068, 2447, Kunstl. 3922; flr. July, fruit Feb., June. A liane of Bangka and Borneo; in Peninsula 2d, 4f, 6k, 9m.

Melodorum rubiginosum, *Hook. fil. & Th.* Near Batu Kurau, Curt.; flr. Oct. A liane of Indo-Malaya; in Peninsula 2d, 4f.

Xylopia fusca, *Maing.* At 300′, Kunstl. 2816; fruit Feb. A tree up to 80′, of Borneo; in Peninsula 2d, 6k.

Xylopia magna, *Maing.* 500-800′, Kunstl. 3712; fruit Jan. A tree up to 60′, endemic, 4f, 6k.

Xylopia olivacea, *King.* 2500-4000′, Wray 2054, 2818, Curt. 1992, Ridl. 11925; flr. Feb., June, Sept., fruit Aug. A tree up to 70′, endemic, 4g, 6j.

Phaeanthus lucidus, *Oliv.* At 4076′, Forest Dept. 1451; flr. and fruit Feb. A bush or small tree, endemic, 2d, 7g, 5h, 7j, 6k, 7l, 9m.

Phaeanthus nutans, *Hook. fil. & Th.* 300-500′, Wray 4182, Kunstl. 8435; fruit Jan., June. A shrub or small tree of Sumatra; in Peninsula common.

MENISPERMACEAE.

Tinomiscium petiolare, *Miers.* 1000-1500′, Kunstl. 8494; flr. Feb. A climber of Indo-Malaya; in Peninsula common.

Fibraurea chloroleuca, *Miers.* 300-800′, Wray 2166, Kunstl. 6451; flr. Aug., fruit June. A liane of W. Malaysia; in Peninsula common.

Arcangelisia Loureiri, *Diels.* 200-800′, Wray 2147, 3153, Kunstl. 5608; fruit Feb., June. A liane of Indo-China and Lower Siam; in Peninsula 6k.

Limacia oblonga, *Miers.* At 300′, B. & .H. 13037. A climber, endemic and common.

Pericampylus incanus, *Miers.* 300-4000′, Wray 2539, Ridl.; flr. July. A climber of Indo-Malaya and China; in Peninsula common.

Stephania capitata, *Spreng.* Up to about 3000′, Curt. 1995, Ridl.; flr. Aug., Sept. A climber of W. Malaysia; in Peninsula 2d, 8g, 5h, 7k, 9l, 9m.

Stephania corymbosa, *Walp.* 3000-3800′, B. & H. 12832; fruit March. A climber of W. Malaysia; in Peninsula 3e only.

Stephania hernandifolia, *Walp.* At 100′, Wray 2438; fruit July. A climber of Africa and Indo-Australia, in Peninsula doubtfully from Penang.

Cyclea elegans, *King.* 1500-2000′, Kunstl., fide Ridl. A climber, endemic and local.

Cyclea laxiflora, *Miers.* Taiping Hills, Kunstl., fide Ridl. A slender climber of Lower Siam; in Peninsula Taiping to Singapore.

CRUCIFERAE.

Nasturtium indicum, *DC.* At 3400′, B. & H. 12813; flr. March. A weed of S. E. Asia; in Peninsula 2d, 8g, 9m.

Cardamine hirsuta, *Linn.* At 3400′, B. & H. 12816. An introduced weed of temperate and subtemperate regions; in Peninsula 2d, 9m.

CAPPARIDACEAE.

Roydsia Scortechinii, *King.* 300-800′, Kunstl., fide Ridl. A climber, endemic, 5h.

Capparis larutensis, *King.* At 500′, Kunstl. 5103; flr. Nov. A thorny climber, endemic, 4f.

VIOLACEAE.

Alsodeia cinerea, *King.* Up to 300′, Kunstl. 3416; fruit Sept. A shrub, endemic and local.

Alsodeia comosa, *King.* At Taiping, Ridl. 14676; fruit Aug. A shrub or small tree of Indo-China and Borneo; in Peninsula 4f, 8g, 5h.

Alsodeia floribunda, *King.* Larut Hills, Kunstl., fide Ridl. A shrub or tree of Sumatra; in Peninsula 4e, 4f, 6k, 9m.

Alsodeia Hookeriana, *King.* 300-500′, Kunstl. 3362; fruit Sept. A tree up to 30′, endemic, 5g.

Alsodeia pachycarpa, *King.* At Waterloo, 500′, Curt. 2718; fruit May. A small tree, endemic, 5g.

Alsodeia Scortechinii, *King.* At 100′, Wray 2339; fruit June. A shrub or tree of Lower Siam; in Peninsula 5h.

Alsodeia Wrayi, *King.* 500-800′, Kunstl. 3199; flr. Aug. A small tree, endemic, 2d, 4d, 4f, 9k.

POLYGALACEAE.

Polygala venenosa, *Juss.* From 500′ upwards, all collectors; flr. Feb., March, Aug., Sept., fruit Oct. A small shrub of W. Malaysia to the Philippines; in Peninsula common.

Salomonia cantoniensis, *Lour.* At Taiping, Hend; flr. all the year. A small herb of S. E. Asia; in Peninsula common.

Epirizanthes elongata, *Bl.* At 2500′, Ridl. A small parasitic herb of Tenasserim to Borneo, and China; in Peninsula common.

Trigoniastrum hypoleucum, *Miq.* 500-1000′, Kunstl. 3784; fruit Jan. A tree of Sumatra; in Peninsula 2d, 4f, 5h, 6j, 9m, 0m.

Xanthophyllum affine, *Korth.* 2500-3500′, Wray 2803, 2815, 2947, H. & N. 2358, 2478; flr. and fruit Feb. A bush or tree of Tenasserim to the Philippines; in Peninsula common.

Xanthophyllum bullatum, *King.* At 100′, Kunstl. 3161; flr. and fruit Aug. A shrub or small tree, endemic, 5h.

Xanthophyllum Griffithii, *Benn.* At 1500′, H. & N. 2392; flr. Feb. A tree up to 60′, of Tenasserim; in Peninsula 2d, 4e, 4f, 5h, 6j, 6k.

Xanthophyllum Kunstleri, *King.* 300-800′, Kunstl. 3512; flr. Oct. A tree up to 80′, endemic, 2d.

Xanthophyllum Palembanicum, *Miq.* 500-3400′, Kunstl. 7615, H. & N. 2392, B. & H. 12822; fruit March, May. A small tree of Sumatra; in Peninsula common.

Xanthophyllum pulchrum, *King.* At 300′, Wray 2659. A shrub or small tree, endemic, 2d.

Xanthophyllum stipitatum, *Benn.* 500-1000′, Kunstl. 3285, fruit Jan. A tree up to 70′, endemic, 4g, 6g, 6k.

Xanthophyllum Wrayi, *King.* At about 300′, Kunstl. 2770, Ridl., Burn-Murdoch 166; flr. Feb. A shrub, endemic and common.

CARYOPHYLLACEAE.

Stellaria uliginosa, *Murr.* 3400-4000′, B. & H. 12652, 12815; flr. Feb. and March. A small herb of North temperate regions. Doubtless introduced. A plant collected by Ridley at 4000′ in 1892 may be this. Not recorded from elsewhere in the Peninsula.

Sagina apetala, *Linn.* At 3700′, B. & H. 12612; flr. March. A small herb of Europe; not previously recorded from the Peninsula. Doubtless introduced.

HYPERICACEAE.

Cratoxylon Maingayi, *Dyer.* Public Gardens, Taiping, Burkill; flr. March. A tree up to 40′ endemic, 2d, 6g.

FLACOURTIACEAE.

Flacourtia Rukam, *Zoll. and Mor.* 100-4300′, Wray 2399, Kunstl. 2858, B. & H. 12578; flr. March, July, fruit March. A small thorny tree of Indo-Malaysia; in Peninsula common.

Hydnocarpus castanea, *Hook. fil.* 1000-1500′, Kunstl. 6872. A tree up to 60′, of Burma and Tenasserim; in Peninsula 1b, 2d, 6e, 3f, 4f, 5g, 5h.

Hydnocarpus nana, *King.* Up to 2000′, Wray 2060, Ridl. 3002. A small tree, endemic, 2d, 4d, 4f, 5h.

Hydnocarpus Wrayi, *King.* Larut, Kunstl., fide Ridl. A tree up to 25′, endemic and local.

Ryparosa Kunstleri, *King.* At 2500′, H. & N. 2379; fruit Feb. A tree up to 100′, of Sumatra; in Peninsula 3f, 4f, 5h.

Ryparosa Scortechinii, *King.* 300-500′, Kunstl. 3757; fruit Jan. A small tree, endemic, 6c, 2d, 4f, 7g, 5h.

GUTTIFERAE.

Garcinia atroviridis, *Griff.* At 2000′, Ridl. A tree up to 60′, endemic, common; occasionally cultivated.

Garcinia costata, *Hemsl.* At 300′, Wray 525. A tree up to 70′, endemic and local.

Garcinia dumosa, *King.* 100-200′, Wray, fide Ridl. A shrub, endemic and local.

Garcinia eugeniaefolia, *Wall.* At 2500′, H. & N. 2375; fruit Feb. A tree up to 60′, of Tenasserim; in Peninsula common.

Garcinia Gaudichaudii, *Planch. and Triana.* Taiping Hills, fide Ridl. A small tree of Indo-China; in Peninsula 2d, 4f, 5j.

Garcinia Mangostana, *Linn.* The Mangosteen. Cultivated all over the Peninsula. Not known in a wild state.

Garcinia nervosa, *Miq.* 300-600′, Kunstl. 3197. A tree up to 80′, of Sumatra and the Philippines; in Peninsula 5h, 6k, 0k, 9m.

Garcinia nigrolineata, *Planch.* At 300′, Wray 2150; flr. June. A tree up to 40′, of Burma to the Carimon Is.; in Peninsula common.

Garcinia opaca, *King.* At 100′, Kunstl. 5460; fruit Jan. A tree up to 40′, endemic, 4f. A doubtful species.

Garcinia penangiana, *Pierre.* At 100′, Kunstl. 7565; flr. May. A tree up to 40′, endemic, 2d, 3f, 6f, 9j, 9m.

Calophyllum canum, *Hook. fil.* At 100′, Kunstl. 5420; flr. Jan. A tree up to 80′, endemic and common.

Calophyllum Kunstleri, *King.* At 100′, Kunstl. 5734; fruit Dec. A tree of Borneo and the Philippines; in Peninsula 1b, 2d, 6e, 8g, 5h, 6j.

Calophyllum molle, *King.* 1000-1500′, Kunstl. 6274, Forest Dept. 20; flr. Feb., fruit Oct. A tree up to 80′, of Sumatra; in Peninsula 2d, 4f, 6g.

Calophyllum pulcherrimum, *Wall.* At Taiping, Anders. 114, Burn-Murdoch 330; fruit March, May. A tree up to 80′, of Indo-China and W. Malaysia; in Peninsula common.

Calophyllum subsessile, *King.* Taiping, Kunstl., fide Ridl. A tree up to 80′, endemic and local.

Kayea grandis, *King.* 300-1000′, Kunstl. 7294, 7500; flr. April. A tree up to 80′, endemic, 2d, 3f, 6j, 6k.

Kayea Kunstleri, *King.* 300-500′, Kunstl. 6850; flr. Nov. A tree up to 50′, endemic, 2d, 3f, 5h.

Kayea nervosa, *T. Anders.* At 100′, Kunstl. 5569; flr. Feb. A tree up to 40′, of Burma; in Peninsula 3e only.

Mesua ferrea, *Linn.* At Taiping, Venning; flr. Oct. A tree of Indo-Malaya; in Peninsula common.

TERNSTROEMIACEAE.

Adinandra acuminata, *Korth.* 2500-4000′, Wray 618, 2804, Kunstl. 6289, 6359, Anders. 103, H. & N. 2339, B. & H. 12830, 13280; flr. Feb., March, fruit July. A tree up to 60′, of Sumatra; in Peninsula common.

Adinandra dumosa, *Jack.* 100-300′, Wray 1972, Hend. 10137; flr. Feb. A bush or small tree of W. Malaysia; in Peninsula very common.

Adinandra integerrima, *T. Anders.* At Waterloo, Curt. 2723; flr. May. A small tree of Siam and Indo-China; in Peninsula 1a, 1b, 2d, 5g, 6g.

Adinandra macrantha, *Teys. and Binn.* Taiping Hills, Kunstl., fide Ridl. A tree up to 80′, of Sumatra and Java; in Peninsula 8g, 5h, 7h, 9l.

Adinandra maculosa, *T. Anders.* At 2500′, Wray 2817. A tree up to 60′, endemic, 2d.

Adinandra parvifolia, *Ridl.* At 4000′, Ridl. 5236; flr. June. A tree up to 40′, endemic, 4e, 6e.

Adinandra villosa, *Choisy.* At 4000′, Forest Dept. 5753; fruit Jan. A tree up to 50′, of Tavoy; in Peninsula 2d, 6e, 4f, 5g.

Ternstroemia Scortechinii, *King.* 300-500′, Kunstl. 3756; fruit Jan. A small tree, endemic, 4f, 5g, 6g.

Eurya acuminata, *DC.* 2000-4200′, Curt. 1999, B. & H. 12619; flr. Sept., fruit March. A shrub or small tree of Indo-Malaysia and China; in Peninsula common.

Pyrenaria acuminata, *Planch.* At 4300′, B. & H. 12870; flr. Feb. A small tree, endemic and common.

Pyrenaria Kunstleri, *King.* 300-2000′, Kunstl. 3948, Curt. 2713, Ridl.; flr. March, fruit Feb., May. A tree up to 40′, endemic, 2d, 4f, 5h.

Schima Noronhae, *Reinw.* 2000-2500′, Hend. 10126, B. & H.; flr. Jan., March. A tree up to 50′, of Indo-Malaya; in Peninsula 1b, 2d, 6e, 4f, 5g, 5h.

Gordonia taipingensis, *Burkill.* 3500-4300′, H. & N. 2359, B. & H. 12734; flr. Feb., March. A tree up to 50′, endemic and local.

Actinidia Championii, *Benth.* 3000-4000′, Kunstl. 5437, Ridl. 5232, B. & H. 12729; flr. June, fruit Jan., March. A climber of China and Sumatra; in Peninsula 5h, 7k.

Saurauia cauliflora, *Bl.* At Batu Kurau, Scort., fide Ridl. At Waterloo, Curt. 2720; flr. May. A tree of Java; in Peninsula 5h.

Saurauia nudiflora, *DC.* 2000-4400′, Fox 166, Ridl., B. & H. 12967; flr. March, Oct., Dec. A bush or small tree of Java; in Peninsula 4d, 6e, 5g, 5h, 6j.

Saurauia tristyla, *DC.* 100-4000′, Scort. 1535, Curt. 1285, Ridl., Hend. 10048, 10144, 10424; flr. Jan., Feb., Oct. A small tree of Indo-China and Siam; in Peninsula common.

Archytaea Vahlii, *Choisy.* At Taiping, Wray 2564, Haniff 13115; flr. March, July. A small tree of W. Malaysia; in Peninsula 2d, 4e, 8g, 5h, 9j, 6k, 8l, 9m.

DIPTEROCARPACEAE.

Dipterocarpus fagineus, *Vesque.* 500-2000′, Kunstl. 3527, Ridl. A tree up to 80′, of Borneo; in Peninsula 2d, 4f.

Dipterocarpus grandiflorus, *Blanco.* 400--2000′, Wray 4057, Ridl.; fruit May. A tree up to 150′, of Sumatra, Borneo and the Philippines; in Peninsula common.

Dipterocarpus Kunstleri, *King.* 500-800′, Kunstl. 7606; fruit May. A tree up to 120′, endemic, 6g, 5h, 6j, 6k.

Anisoptera Curtisii, *Dyer.* 300-2000′, Kunstl. 3618, 3706, B. & H.; fruit Nov., Dec. A tree up to 100′, of Lower Siam, Borneo and the Philippines; in Peninsula 2d, 3f, 6j.

Shorea Kunstleri, *King.* 500-800′, Kunstl. 3705; fruit Dec. A tree up to 100′, endemic and local.

Shorea macroptera, *Dyer.* 500-1000′, Kunstl. 3742; fruit Jan. A tree up to 80′, of Borneo; in Peninsula common, unless absent in the N. E.

Shorea Maxwelliana, *King.* 300-800′, Kunstl. 3744; fruit Jan. A tree up to 80′, endemic, 2d, 5h, 6j.

Shorea Ridleyana, *King.* 500-800′, Kunstl. 3571, 3617; flr. Nov. A tree up to 80′, endemic, 6f, 5g.

Pachychlamys Hemsleyanus, *Ridl.* At Taiping, Curt. 3213; fruit Oct. A tree up to 60′, endemic, 2d.

Pachychlamys Thiseltoni, *Ridl.* Taiping Hills, Kunstl., fide Ridl. A tree up to 80′, of Sumatra; in Peninsula 2d, 3f, 4f, 5h, 8j, 9k.

Hopea globosa, *Brand.* At 700′, B. & H. 13035; a seedling in March. A lofty tree, endemic, 6f, 7g, 5h, 5j, 8j, 7k.

Hopea micrantha, *Hook. fil.* 500-800′, Kunstl. 3525; flr. Oct. A tree up to 80′, of Borneo; in Peninsula 2d, 3f, 6k, 0m.

Hopea nervosa, *King.* 500-800′, Kunstl. 3690; fruit Dec. A tree up to 70′, endemic, 4e.

Hopea Pierrei, *Hance.* Taiping Hills, Kunstl., fide Ridl. A tree up to 80′ or more, of Indo-China, Borneo and the Philippines; in Peninsula 2d, 6k, 9m.

Synaptea faginea, *Pierre.* Larut, Kunstl., fide Ridl. A tree up to 70′, of Indo-China and Tenasserim; in Peninsula 2d, 3f, 5h.

Synaptea Lowii, *Ridl.* 800-1200′, Kunstl. 7496; flr. April. A tree up to 80′, endemic, 3f.

Synaptea perakensis, *Ridl.* 300-1500′, Wray 2264, Kunstl. 7549; flr. April, fruit June. A tree up to 80′, endemic, 3f.

Synaptea reticulata, *Ridl.* 1500-2000′, Kunstl. 6969; flr. Dec. A tree up to 80′, endemic and local.

Vatica Kunstleri, *Ridl.* At 300′, Kunstl. 5338; fruit Dec. A shrub or tree up to 30′, endemic, 4f.

Vatica Wallichii, *Dyer.* At 100′, Kunstl. 5432, ?6594; flr. Sept., fruit Jan. A tree up to 100′, of Lower Siam and Bangka; in Peninsula 2d, 4f, 4g, 8g, 4h, 8i, 6k, 9k, 9l, 9m.

Balanocarpus Curtisii, *King.* 100-500′, Kunstl. 3294, 6543; flr. Aug., Sept. A tree up to 30′, of Borneo; in Peninsula 2d.

Balanocarpus Hiemii, *King.* Forest Dept. 28; flr. Sept., fruit Feb. A tree up to 60′ or more, endemic, 2d, 5g, 6g, 8g, 4h, 5h, 6j, 6k.

Balanocarpus penangianus, *King.* At Taiping, Kunstl., fide Ridl. A tree up to 70′, endemic, 2d, 6k.

Pachynocarpus Stapfianus, *King.* 300-850′, Kunstl. 7466. A tree up to 100′, of Lower Siam; in Peninsula 1b, 2d, 4f, 4g, 6g, 8g, 5h.

ANCISTROCLADACEAE.

Ancistrocladus pinangianus, *Wall.* 100-800′, Wray 1862, Kunstl. 6452; flr. May, Aug. A bush or climber of Indo-China to Sumatra; in Peninsula common.

BIXACEAE.

Bixa orellana, *Linn.* At 4000′, Anders. 87. The Arnotto. A bush, pantropic, of S. American origin; in Peninsula cultivated.

MALVACEAE.

Sida rhombifolia, *Linn.* At Taiping, Hend.; flr. and fruit all the year. An undershrub, pantropic, common through the Peninsula.

Urena lobata, *Linn.* 100-300′, Hend. 10051, 10148; flr. and fruit all the year. An undershrub, pantropic; in Peninsula common.

Hibiscus floccosus, *Mast.* 300-500′, Kunstl. 7024; fruit Jan. A tree up to 80′, endemic, 4d, 6d, 4f, 5f, 6g, 6j, 6k, 7k.

Hibiscus surattensis, *Linn.* At 800′, Hend. 10049; fruit Jan. A sprawler of the Old World tropics; in Peninsula common.

Durio macrophyllus, *Ridl.* At about 3000′, Ridl. 5352; flr. June. A tree up to 60′, endemic, 4d, 3f, 6k.

Durio malaccensis, *Planch.* Larut, Forest Dept. 39; flr. Sept. A lofty tree, endemic, 6j, 6k.

Durio zibethinus, *Linn.* The Durian. A tree up to 100′, of Indo-China and W. Malaysia, known only in cultivation.

Boschia Griffithii, *Mast.* 100-500′, Wray 2444, Kunstl 3303, 3496; flr. July, Sept. A tree up to 60′, of Sumatra; in Peninsula common.

Neesia synandra, *Mast.* At Batu Kurau, Haniff 13265; flr. May. A tree up to 70′, of Lower Siam; in Peninsula 2d, 6e, 4f, 8g, 5h, 9m.

Eriodendron anfractuosum, *DC.* Kapok. Commonly cultivated. A tree up to 70′, pantropic.

STERCULIACEAE.

Sterculia bicolor, *Mast.* At Taiping, Wray 2378; flr. July. A tree up to 60′, endemic, 6k.

Sterculia hyposticta, *Miq.* At 500′, Hend. 10129; fruit Jan. A small shrub of Indo-China to Sumatra; in Peninsula common in the North.

Sterculia Kunstleri, *King.* 500-800′, Kunstl. 4782; fruit Aug. A tree up to 70′, endemic and local.

Sterculia laevis, *Wall.* 300-800′, Kunstl. 3941, 4068; fruit March. A shrub about 6′, of Tenasserim, Java, Borneo; in Peninsula common.

Sterculia parviflora, *Roxb.* At 300′, Wray 2541; fruit July. A tree up to 60′, of Sylhet, Burma and Cochin-China; in Peninsula common.

Sterculia parvifolia, *Wall.* 300-2300′, Wray 2256, 4233, Kunstl. 3849, Ridl.; flr. June. A small tree, endemic, 2d, 5h.

Sterculia rubiginosa, *Vent.* 500-3500′, Wray 2994 (var. ensifolia) Kunstl. 6489, H. & N. 2365; flr. Feb., fruit Sept. A small tree, of Indo-Malaya; in Peninsula, common from Penang to Singapore.

Scaphium longiflorum, *Ridl.* Waterfall Hill, Wray, fide Ridl. A tree, endemic and local.

Tarretia perakensis, *King.* 500-800′, Kunstl. 3184. A tree up to 80′, endemic, 5h.

Tarrietia simplicifolia, *Mast.* At 300′, Ridl., (fallen fruits only). A lofty tree, endemic, 5h, 6j, 6k, 9m.

Helicteres Isora, *Linn.* At 100′, Kunstl. 2268; flr. Aug. A shrub or small tree, of Indo-Australia and S. Africa; in Peninsula 2d, 8j.

Pterospermum Blumeanum, *Korth.* At 300′, Kunstl. 3390; flr. Sept. A tree up to 50′, of Indo-Malaya; in Peninsula Langkawi to Singapore.

Byttneria Curtisii, *Oliv.* 100-500′, Ridl. 14664, Hend. 10420, 10474; flr. Aug., fruit Feb., Oct. A slender climber, endemic, 2d.

Byttneria Maingayi, *Mast.* At Waterloo, Curt. 2890; flr. Oct. A woody climber, endemic and common in the South.

Leptonychia glabra, *Turcz.* 100-1000′, Wray 1820, Kunstl. 2185 (var. Mastersiana), Curt., Hend. 10464; flr. Feb., May, Aug., fruit Feb., May. A shrub or small tree of Indo-Malaya; in Peninsula common.

TILIACEAE.

Brownlowia macrophylla, *King.* 200-500′, Wray 2148, Kunstl. 6861; flr. June, Nov. A tree up to 40′, endemic and local.

Pentace eximia, *King.* 500-800′, Kunstl. 3482, 3649; flr. Oct., fruit Dec. A tree up to 70′, endemic, 6k.

Pentace Kunstleri, *King.* At 100′, Kunstl. 6811; flr. Nov. A tree up to 40′, endemic, 6g.

Pentace macrophylla, *King.* At 100′, Wray 1737. A tree up to 30′, endemic and local.

Pentace perakensis, *King.* 300-1000′, Kunstl. 3428; flr. Oct. A tree up to 40′, endemic and local.

Pentace strychnoidea, *King.* 500-1000′, Kunstl. 3478; flr. Oct. A tree up to 80′, endemic and local.

Schoutenia Kunstleri, *King.* At Ulu Tupai, Wray 2692; flr. Aug. A tree up to 70′, of Lower Siam; in Peninsula 2d, 6f.

Schoutenia Mastersii, *King.* 500-1000′, Kunstl. 3381; flr. Sept. A tree up to 50′, of Borneo; in Peninsula 2d, 6g, 6j, 6k.

Grewia antidesmaefolia, *King.* 300-500′, Kunstl. 3051. A tree up to 40′, of Lower Siam; in Peninsula 4d, 4f, 9k.

Grewia erythrocarpa, *Ridl.* At 300′, Wray, fide Ridl. A small tree up to 14′, endemic, 5g.

Grewia fibrocarpa, *Mast.* 200-2500′, Wray 599, 2176, 2827; flr. June. A tree up to 50′, endemic, 2d, 4f, 5g, 5h, 6j, 0j, 6k, 0k.

Grewia globulifera, *Mast.* At Taiping, Forest Dept. 1153. A large or small tree, of Borneo; in Peninsula, Penang to Singapore.

Grewia Miqueliana, *Kurz.* 2000-3200′, Wray 4039, B. & H. 12791; flr. April, fruit March. A tree up to 40′, endemic, Taiping to Johore.

Grewia umbellata, *Roxb.* 300-3900′, Wray 4005, B. & H. 12936; flr. March. A climbing shrub of Siam, Java and Borneo; in Peninsula common.

Trichospermum cymbiforme, *Sprague.* Larut, Kunstl., fide Ridley. A tree up to 100′, of Sumatra; in Peninsula 2d.

Trichospermum Kurzii, *King.* At 300′, Wray 1970; flr. May. A tree up to 100′, of Tenasserim; in Peninsula 4f, 5h, 5j, 6k.

Eleocarpus Barnardii, *Burkill.* At 100′, Barnard; flr. Feb. A tree, endemic and local.

Eleocarpus Hullettii, *King.* 300-500′, Kunstl. 3412; flr. Sept. A tree up to 40′, endemic; in Peninsula 2d, 4f, 8j, 9m.

Eleocarpus Jackianus, *Wall.* 100-1000′, Kunstl. 2530, 5575; flr. Feb. A tree up to 100′, of Borneo; in Peninsula, common on the West.

Eleocarpus obtusus, *Bl.* At 2000′, Forest Dept. C. F. 945; flr. Oct. A tree up to 40′, of Indo-Malaya; in Peninsula common.

Eleocarpus paniculatus, *Wall.* At 100′, Kunstl. 6215; flr. June. A tree up to 40′, of Lower Siam, Bangka, Borneo; in Peninsula common.

Eleocarpus parvifolius, *Mast.* At 2500′, H. & N. 2374; fruit Feb. A tree up to 100′, of Lower Siam and Borneo; in Peninsula Penang to Singapore.

Eleocarpus pedunculatus, *Wall.* Taiping Hill, Ridl. 11917; fruit Feb. A tree up to 80′, of Borneo; in Peninsula 2d, 6k, 9m.

Eleocarpus rugosus, *Roxb.* At 100′, Kunstl. 7293; flr. March. A tree up to 100′, of India; in Peninsula 2d, 4f, 9m.

Eleocarpus stipularis, *Bl.* 3500-4100′, Kunstl. 6266, Derry, H. & N. 2348; flr. Feb. A tree up to 60′, of W. Malaysia; in Peninsula common.

GONOSTYLACEAE.

Gonostylus Maingayi, *Hook. fil.* At 100′, Kunstl. 6925; fruit Dec. A large tree, endemic, 2d, 4f, 6j, 6k, 9m.

LINACEAE.

Ixonanthes reticulata, *Jack.* 200-300′, Hend. 10438; flr. Jan. A shrub up to 8′, of Borneo; in Peninsula 2c, 2d, 3f, 5h, 7k, 7l, 9m.

OXALIDACEAE.

Oxalis corniculata, *Linn.* At 3600′, B. & H. 12649; fruit March. A creeping herb, cosmopolitan; in Peninsula common near houses.

Oxalis corymbosa, *DC.* At 3400′, B. & H. 12829; flr. March. A creeping herb, said to be of Mascarene origin; in Peninsula running wild here and on Penang Hill.

Connaropsis laxa, *Ridl.* Taiping Hills, Kunstl., Curt., fide Ridl. A tree up to 50′, endemic and local.

Connaropsis macrophylla, *King.* 200-2500′, Ridl. 2987, Anders., Hend. 10071, 10321, 10475, B. & H. 12824; flr. Jan.-March, Aug. Shrub or small tree, endemic, 2c, 2d, 3d, 3f, 4f, 8g, 9m.

Dapania scandens, *Stapf.* At about 1000′, Wray 2078, 3146, Curt. 2724; flr. May, fruit June. A woody climber of Sumatra and Borneo; in Peninsula 4f.

BALSAMINACEAE.

Impatiens Curtisii, *Hook. fil.* 2300-4000′, Curt. 1348, Ridl. 1955, B. & H. 12806: flr. Feb., Dec. A herb, endemic and local.

Impatiens Holstii, *Engl. and Warb.* At Maxwell's Hill, B. & H. A Trop. African species, cult. and running wild here.

RUTACEAE.

Evodia latifolia, *DC.* 300-2000′, Wray 1819, 2567, Ridl. 3008, 14683; flr. July, Aug. A tree of 20′, of W. Malaysia; in Peninsula 2d, 4e, 3f, 6f, 5h, 6j, 6k, 7l.

Evodia macrocarpa, *King.* At 100′, Kunstl. 7489; fruit April. A tree up to 50′, endemic, 2d, 5g.

Evodia malayana, *Ridl.* Wray 3126, Scort. 154, Forest Dept. C. F. 5653; flr. March, Oct. A bush or small tree, endemic, 1b, 6b, 2d, 3f, 8h, 6k, 9m.

Evodia pilulifera, *King.* At about 2000′, Wray 2995, Ridl. A shrub up to 15′, endemic, 4f, 5g, 5h, 7k.

Tetractomia Roxburghii, *Hook. fil.* 100-4700′, Wray 2106, Kunstl. 6194, Derry, B. & H. 12583; flr. June, fruit March, June. A tree up to 80′, endemic, 2d, 5g.

Acronychia Porteri, *Hook. fil.* 300-500′, Kunstl. 7469; fruit April. A tree up to 70′, of Lower Siam; in Peninsula 2d, 8g, 5h, 6j, 6k, 9m.

Glycosmis macrophylla, *Lindl.* 500-1000′, Kunstl. 2549; flr. Nov. A shrub up to 10′, endemic, 2d.

Glycosmis malayana, *Ridl.* 100-4000′, Kunstl. 2827, 2839, Anders. 129, Hend. 10125, B. & H. 12903, 13026; flr. Jan., March, Nov., fruit Feb., March. A shrub, endemic, Langkawi to S ngapore.

Glycosmis puberula, *Lindl.* 2000-4500′, Ridl. 3006, 3011. A shrub of Lower Siam and the Philippines; in Peninsula 1b, 2c, 2d, 8h, 6k, 9m.

Micromelum pubescens, *Bl.* At Ulu Tupai, Wray 2682; flr. Aug. A large shrub or small tree of Indo-Australia and China; in Peninsula common.

Clausena excavata, *Burm.* Up to 2000′, Wray 3320, Ridl.; flr. Feb. A foetid shrub or small tree of Indo-Malaya to the Philippines; in Peninsula common.

Luvunga eleutheranthera, *Dalz.* At 2500′, Wray 2977, 3215. A liane of Indo-Malaya; in Peninsula 2d, Pahang, 9l, 9m.

Luvunga scandens, *Ham.* At 3800′, B. & H. 12999; flr. March. A liane of Indo-Malaya; in Peninsula 2d, 3f, 8h, 8k.

SIMARUBACEAE.

Brucea sumatrana, *Roxb.* At Waterloo, Curt. 134; flr. Dec. A shrub up to 6′, of Indo-Australia; in Peninsula common.

Eurycoma apiculata, *Benn.* 2500-3400′, Ridl., B. & H. 12707; flr. March, fruit June. A shrub up to 8′, endemic, 2d, 4e, 3f, 5g, 5h, 9k.

Eurycoma longifolia, *Jack.* 300-3000′, Kunstl. 4075, 7244, 7548, Hend. 10131; flr. Jan. Feb., fruit March, April. A shrub or small tree of Indo-Malaya; in Peninsula common.

OCHNACEAE.

Gomphia corymbosa, *Ridl.* 1500-2000′, Kunstl. 7310; flr. Jan. A shrub or small tree, endemic, 2d, 4f, 9m.

Gomphia sumatrana, *Jack.* Larut, Kunstl., fide Ridl. A tree about 40′, of Tenasserim, Sumatra and Borneo; in Peninsula common.

Tetramerista glabra, *Miq.* At 300′, Wray 2129. A tree up to 60′, of Sumatra and Borneo; in Peninsula common.

BURSERACEAE.

Canarium denticulatum, *Bl.* Larut Hills, Kunstl., fide Ridl. A tree up to 70′, of Java; in Peninsula 4f.

Canarium kadondon, *Benn.* At 100′, Kunstl. 6707, 7577; flr. Oct., fruit May. A tree up to 50′, endemic and common.

?Canarium littorale, *Bl.* 2000-2500′, Kunstl. 6998, fide Ridl. A doubtful species. "It closely resembles *C. littorale, Bl.* of Java, but the single specimen is insufficient to be certain of." (Ridley).

Canarium parvifolium, *Benn.* 3000-3500′, Kunstl. 2618; fruit Dec. A lofty tree, endemic, 4f, 6k, 9m.

Canarium pilosum, *Benn.* var. hirtellum, *Ridl.* Up to 500′, Wray 2645, Haniff 13129; flr. March, Aug., fruit March. A tree up to 60′, endemic, the var. at 2d, 4f, the species at 5h, 6k, 9m.

Canarium rufum, *Benn.* At Kota, Wray 3325; fruit Feb. A tree up to 60′, endemic, 3d, 3f, 4f, 5g, 5h, 8h, 6k, 9m.

Santiria apiculata, *Benn.* 300-500′, Kunstl. 3556, 3760; fruit Jan. A tree up to 60′, endemic, 4f, 6f, 6g, 5h, 6j, 6k, 9l, 9m.

Santiria fasciculata, *Benn.* 100-800′, Kunstl. 3319, 3500, 6610, 6832 (var. puberula); flr. Sept., fruit Sept.-Nov. A tree up to 50′, endemic, 2d, 6e, 6g, 5h, 6k.

Santiria laevigata, *Bl.* At 100′, Kunstl. 5441; fruit June. A tree up to 150′, of Sumatra; in Peninsula 4f, 5h, 7h, 8h, 5j, 6j, 6k, 9m.

Santiria laxa, *King.* 300-800′, Kunstl. 3192, 3516; flr. Aug. fruit Oct. A tree up to 90′, endemic, 2d, 6e, 5h, 6j, 6k, 9k, 9m.

Santiria longifolia, *King.* 100-800′, Kunstl. 3594, 6838; fruit Nov. A tree up to 20′, endemic, 2d.

Santiria macrocarpa, *King.* At 100′, Kunstl. 5304; fruit Dec. A tree up to 80′, endemic and local.

Santiria multiflora, *Benn.* 300-800′, Kunstl. 4988; fruit Oct. A tree up to 60′, of Borneo; in Peninsula 4f, 5h, 7h, 8h, 6k, 9m.

Santiria oblongifolia, *Bl.* 100-1000′, Kunstl. 6602, 8472; flr. Sept., fruit Feb. A tree up to 80′, of W. Malaysia; in Peninsula 2d, 4f, 6k.

Santiria Wrayi, *King.* 800-1000′, Kunstl. 3689; fruit Dec. A tree up to 30′, endemic, 4f, 5h, 6j, 7l.

Icicaster Planchoni, *Ridl.* At 100′, Kunstl. 5545; fruit Feb. A tree up to 60′, endemic, 4f, 5h, 6k, 9m.

MELIACEAE.

Sandoricum indicum, *Cav.* 300-500′, Kunstl. 8297; fruit Nov. A tree up to 80′, of Indo-Malaya; in Peninsula common in villages.

Sandoricum nervosum, *Bl.* At Kota, Wray 3345; flr. Feb. A tree up to 80′, of Sumatra, Java and Philippines; in Peninsula common in cultivation.

Megaphyllaea annulata, *Ridl.* At 3000′, Curt. 2693, Ridl. 11963; flr. May. A tree, endemic and local.

Megaphyllaea perakensis, *Hemsl.* 2500-3800′, Wray, Kunstl. 5305, 6317, Ridl. 5358, B. & H. 12985; flr. March, fruit June, July, Dec. A tree up to 40′, endemic and local.

Chisocheton macrothyrsus, *King.* 2500-4000′, Wray, Scort. 82, Curt. 2002; flr. Nov., fruit Sept. A tree up to 40′, endemic, 5h.

Chisocheton penduliflorus, *Planch.* At about 2000′, Wray 3244, Scort. 48, Ridl., Derry. A shrub or small tree, endemic, 2d, 4f, 6j, 6k, 7l.

Chisocheton rubiginosus, *King.* 300-500′, Kunstl. 3848, 5095; flr. March, fruit Nov. A tree up to 60′, endemic and local.

Dysoxylum cauliflorum, *Hiern.* 600-1000′, Kunstl. 3267; flr. Aug. A tree about 60′, of Borneo and Philippines; in Peninsula 2d, 4e, 5h, 0j, 6k, 9m.

Dysoxylum costulatum, *Miq.* 1500-2900′, Kunstl. 6791, B. & H. 12690; fruit March, Nov. A tree up to 50′, of Sumatra; in Peninsula common.

Dysoxylum densiflorum, *Miq.* 3000-3200′, Wray 4323, Derry. A tree up to 40′, of Sumatra and Java; in Peninsula 4f, 5g, 9m.

Dysoxylum interruptum, *King.* 3000-4000′, Kunstl. 6349. A tree up to 40′, endemic and local.

Dysoxylum macrothyrsum, *Miq.* var. microbotrys, *Ridl.* 500-800′, Kunstl. 6788; flr. Nov. A tree up to 60′, of Borneo and Java; in Peninsula the var. at 4f, the species at 4f, 5g, 5h, 6j, 6k, 9m.

Dysoxylum rugulosum, *King.* 300-500′, Kunstl. 2863, 3158; fruit Aug. A tree up to 25′, endemic, 5g.

Amoora Maingayi, *Hiern.* Larut, Kunsd., fide Ridl. A tree up to 35′, endemic, 5h, 6k.

Amoora Ridleyi, *King.* At 100′, Kunstl. 5383; fruit Dec. A tree up to 100′, endemic, 4f, 6g, 8j, 6k.

Amoora rubescens, *Hiern.* Larut, Forest Dept. C. F. 257; flr. May. A tree up to 60′, endemic, 2d, 4f, 6j, 6k, 8l, 9m.

Amoora rubiginosa, *Hiern.* 100-200′, Kunstl. 6221; flr. June. A tree up to 100′, endemic, 6k, 9m.

Aphanamixis Rohituka, *Pierre.* At about 2500′, Ridl. (not seen). A tree up to 70′, of Indo-Malaya and China; in Peninsula common.

Aphanamixis sumatrana, *Ridl.* At about 2000′, Wray 2216, 2990, Ridl. A tree up to 20′, of Sumatra; in Peninsula 2d, 4e, 3f, 4f, 5h, 6k.

Aglaia cinerea, *King.* 3000-3500′, Kunstl., fide Ridl A shrub or small tree, endemic, 5g.

Aglaia cordata, *Hiern.* 2000-3000′, Wray 2982, 2962A, Kunstl. 6360, Curt., Ridl. 11915; flr. May, fruit Feb., July. A tree up to 30′, of Borneo; in Peninsula 1b, 4d, 6g, 4h, 6k, 9m.

Aglaia Griffithii, *Kurz.* 1000-4000′, Wray 2224, Kunstl. 4321, 6341, 6889, Ridl. 3021; flr. Feb., July, fruit Nov. A tree up to 50′, endemic and common.

Aglaia Hiernii, *King.* At 100′, Kunstl. 6706; flr. Oct. A tree up to 100′, endemic, 4f, 6k.

Aglaia Kunstleri, *King.* At 300′, Kunstl. 5287; fruit Dec. A tree up to 60′, endemic, 4f, 5g.

Aglaia leucophylla, *King.* Larut, Kunstl., fide Ridl. A tree up to 60′, endemic and local.

Aglaia macrostigma, *King.* 500-800′, Kunstl. 5474; fruit Jan. A tree up to 60′, endemic and local.

Aglaia membranifolia, *King.* 500-800′, Kunstl. 5159; flr. Nov. A tree up to 30′, of Sumatra; in Peninsula 4f.

Aglaia odoratissima, *Bl.* 300-3800′, Wray 2664, 3202A, 2959, Kunstl. 3507, Ridl. 14679, B. & H. 12968; flr. March, June. A tree up to 40′, of Siam to Java; in Peninsula common.

Aglaia oligophylla, *Miq.* Larut, Kunstl., fide Ridl. A tree up to 20′, of Burma and Sumatra; in Peninsula 2d, 6k, 7l, 9m.

Aglaia palembanica, *Miq.* 300-4200′, Kunstl. 3882, Curt. 2003, B. & H. 13024; flr. Sept., fruit Feb. A shrub or tree up to 20′, of Sumatra and Borneo; in Peninsula 1b 2d, 4e.

Aglaia tenuicaulis, *Hiern.* Up to about 2500′, Kunstl. 3091, Ridl. A shrub or small tree of Sumatra; in Peninsula 2d, 5g, 5h, 6j.

Aglaia trichostemon, *C. DC.* At Maxwell's Hill, Ridl. (not seen). A tree about 20′, of Borneo; in Peninsula 2d, 6e, 5g, 7h, 6j, 6k, 9m.

Walsura multijuga, *King.* 100-1500′, Wray 1859, 2568, 4183, Kunstl. 3446, 6915, 8400; flr. Dec., fruit June, July, Dec. A tree up to 30′, of Sumatra, Borneo and Philippines; in Peninsula 2d, 4f, 5h, 6k, 9m.

Heynea trijuga, Roxb. At 500′, Wray 1860, Kunstl. 3971; fruit March. A tree up to 20′, of Indo-Malaya and China; in Peninsula 2d, 0j, 9m.

CHAILLETIACEAE.

Chailletia deflexifolia, *Turcz.* 300-800′, Kunstl. 5501; fruit Feb. A climber up to 70′, of Java; in Peninsula 3f, 4f, 6k, 8l.

Chailletia tenuifolia, *King.* 300-2000′ (fide Ridl.), Wray 1850. A shrub or small tree up to 15′, endemic, 3d.

OLACACEAE.

Ctenolophon parvifolius, *Oliv.* Ridl. 11433; fruit Dec. A tree up to 40′, of Sumatra and Borneo; in Peninsula common.

Scorodocarpus borneensis, *Becc.* Larut Hills, Kunstl., fide Ridl. A tree up to 70′, of Borneo; in Peninsula 3f, 8g, 5h, 8j, 8h, 9l, 9m.

Strombosia javanica, *Bl.* At Waterloo, Curt., fide Ridl. A tree up to 30′, of Tenasserim to Borneo; in Peninsula 2d, 4f, 6g, 5h, 6k, 0k, 9m.

Strombosia rotundifolia, *King.* At Taiping, Burn-Murdoch 332; fruit May. A large shrub, endemic, 6g, 8j, 9m.

Platea latifolia, *Bl.* 300-500′, Kunstl. 5885; fruit April. A tree up to 100′, of Java; in Peninsula 2d.

Gomphandra affinis, *Mast.* 100-1000′, Curt. 2721, Ridl. 14680; flr. May, fruit Aug. A shrub about 8′, of Burma; in Peninsula common.

Gomphandra gracilis, *King.* 200-2500′, Wray 2138, 3002; fruit June. A shrub or small tree, endemic, 4f.

Gomphandra lanceolata, *King.* 1700-4700′, Wray 2829, Kunstl. 4211 (var. angustifolia), 4240, Ridl. (var. a, Burkill), B. & H. 12656, 12801; flr. March, May, June. A shrub up to 10′, endemic and common. Var. a, Burkill does not fit in with any of Ridley's varieties. It occurs also in Negri Sembilan, and on Bukit Kutu, and G. Berumban.

Gomphandra nyssifolia, *King.* 4000--4500′, Kunstl. 3822; fruit Jan. A tree up to 20′, endemic, 4d.

Gomphandra penangiana, *Wall.* At 300′, Wray 2667. A shrub up to 8′, endemic, 2d, 5g, 6j, 6k.

Gomphandra sp. 3000-4200′, Fox 161, Ridl.; flr. Oct. A shrub. Does not agree with any species in Ridley. Near G. gracilis.

Stemonurus umbellatus, *Becc.* 3000-3500′, Kunstl., fide Ridl. A tree up to 120′, of W. Malaysia; in Peninsula 6k.

Phytocrene bracteata, *Wall.* 3000-3500′, Kunstl. 6911; flr. Dec. A long prickly climber of Burma and Borneo; in Peninsula 2d, 6k, 0k, 9m.

Phytocrene oblonga, *Wall.* At 100′, Kunstl. 5606; flr. Feb. A liane, endemic, 2d, 6k.

Phytocrene palmata, *Wall.* At 100′, Kunstl. 5560; fruit Feb. A liane, endemic, 2d, 5h, 6k.

Miquelia caudata, *King.* At about 2500′, Ridl. 5229. A slender climber, endemic, 8f, 5g.

Iodes ovalis, *Bl.* Larut, Kunstl., fide Ridl. A climber up to 60′, of Malaysia; in Peninsula 4g, 6k, 9l.

Iodes velutina, *King.* At 200′, Scort. A woody climber, endemic, 6j, 6k, 9m.

Lophophyxis Maingayi, *Hook. fil.* 200-500′, Kunstl. 6552. A liane, endemic, 5g, 6k.

Erythropalum scandens, *Bl.* To about 2500′, Wray, Curt. 2777, Ridl.; flr. June, Oct. A woody climber of Indo-Malaya; in Peninsula 2d, 3f, 4f, 8g, 6k, 9m.

ILICACEAE.

Ilex cymosa, *Bl.* 800-1000′, Kunstl. 8506; flr. Feb. A tree up to 50′, of Indo-Malaya; in Peninsula common.

Ilex epiphytica, *King.* At about 2500′, Ridl. 3008. A shrub of Borneo; in Peninsula 4e, 6e, 5g, 5h, 7k.

Ilex glomerata, *King.* 3500-4000′, Kunstl. 6926; flr. Dec. A tree up to 30′, of Tenasserim and Java; in Peninsula 3e only.

Ilex malaccensis, *Loesen.* At 300′, Kunstl. 2463; flr. Oct. A shrub up to 18′, of Sumatra and Borneo; in Peninsula 6k.

Ilex triflora, *Bl.* 3000-4600′, Kunstl. 6991, Ridl. 5376, Anders. 67; flr. March, June, fruit Dec. A bush up to 15′, of Indo-Malaya and China; in Peninsula 2c, 4d, 4e, 6e, 4f, 5g, 7k, 9k.

CELASTRACEAE.

Microtropis elliptica, *King.* 300-4500′, Kunstl. 4193, Ridl.; fruit May. A shrub or small tree, endemic, 2d, 4f, 9k.

Microtropis filiformis, *King.* At about 2500′, Ridl.; flr. June. A shrub or small tree of Burma and Lower Siam; in Peninsula 1b, 2b, 3f, 4f, 5h,

Glyptopetalum quadrangulare, *Prain.* At 2500′, Wray 3229. A shrub up to 15′, endemic, 4f, 6g, 5h.

Lophopetalum pachyphyllum, *King.* 800-1500′, Kunstl. 7525; flr. April. A tree up to 100′, endemic, 6j, 6k.

Lophopetalum Scortechinii, *King.* 500-1000′, Kunstl. 6676; flr. Oct. A tree up to 80′, endemic and local.

Celastrus malayensis, *Ridl.* 3000-4100′, Curt. 2005, Ridl. 5237, H. & N. 2466; fruit Feb., June. A climber up to 50′, endemic, common.

Kurrimia paniculata, *Wall.* 100-1000′, Wray 2376, 2386, Kunstl. 4111, 5772, 6501; flr. July, Aug., fruit Apr., Nov. A tree up to 60′, of W. Malaysia except Java; in Peninsula, Kedah to Singapore.

Perrottetia alpestris, *Loesen.* 3900-4400′, Curt. 2090, Fox 171, Ridl. 3013, 5512, 11451, B. & H. 12556; fruit March. A shrub up to 13′, of W. Malaysia and Philippines; in Peninsula 4f, 5g.

Hippocratea nigricaulis, *Ridl.* 300-500′, Kunstl. 6556; flr. Sept. A slender climber of Burma; in Peninsula 2d, 5h, 6k, 8l

Salacia flavescens, *Kurz.* At about 4000′, Curt. 2004. A sprawler of Tenasserim and Lower Siam; in Peninsula Setul to Singapore.

Salacia Maingayi, *Laws.* 500-800′, Kunstl. 7471; flr. April. A climber up to 15′, endemic, 2d, 6d, 5g.

Salacia prinoides, *DC.*, var. macrophylla, *King.* 300-500′, Kunstl. 7552; fruit May. A climber or bush, the species of Indo-Malaya and the Philippines; in Peninsula the species at 2b, 2c, 3f, 6k, 9m, the var. at 3e only.

Salacia Wrayi, *King.* At Kota, Wray, fide Ridl. A liane, endemic and local.

RHAMNACEAE.

Zizyphus affinis, *Hemsl.* 300-1500′, Kunstl. 3568, 6720, Ridl. 11434; flr. Oct., Dec., fruit Nov. A thorny climber, endemic, 1b, 2d, 3f.

Zizyphus calophylla, *Wall.* At 300′, Kunstl. 5255; flr. & fruit Dec. A thorny climber, of Bangka and Borneo; in Peninsula common.

Zizyphus Kunstleri, *King.* 300-500′, Kunstl. 3772, Ridl. 3005; fruit Jan. A thorny climber, endemic, 2d, 3f, 9l.

Zizyphus oenoplia, *Mill.* At 500′, Kunstl. 5276; fruit Dec. A thorny bush of Indo-Australia; in Peninsula 1b, 2b, 2d, 6d, 6f, 5h, 5j, 6k, 9m.

Colubrina anomala, *King.* 500-800′, Kunstl. 6561; flr. Sept. A tree up to 40′, endemic and local.

Ventilago malaccensis, *Ridl.* At 100′, Kunstl. 6573; fruit Sept. A woody climber of Lower Siam and Borneo; in Peninsula 1b, 2d, 6g, 7g, 6k, 9m.

Ventilago oblongifolia, *Bl.* At Waterfall Hill, Wray, Scort., fide Ridl. A liane of Java and Philippines; in Peninsula 5g, 5h, 6j, 9l, 9m.

Smythea macrocarpa, *Hemsl.* 200-2000′, Wray 36, 2211, Kunstl. 3642, 6597, 7726; flr. June, Sept., fruit June, Dec. A liane, endemic, 2d, 4f, 6k, 7l, 9l.

AMPELIDACEAE.

Vitis cantoniensis, *Seem.* 1500-2000′, Kunstl. 2285; flr. Sept. A slender vine of Indo-China and China; in Peninsula 5h, 6j, 7l.

Vitis cinnamomea, *Wall.* 300-500′, Wray 2925, Kunstl. 2912; flr. April. A slender vine, endemic, Kedah to Singapore.

Vitis elegans, *Kurz.* 500-3700′, Hend. 10471, B. & H. 12789; flr. Feb. A vine, endemic and common. Hend. 10471 is a large form, connecting this species with V. cinnamomea.

Vitis furcata, *Laws.* 200-about 2500′, Kunstl. 8402 (var. pubescens), Ridl., H. & N. 2398; flr. June, fruit Jan., Feb. A woody vine of Sumatra; in Peninsula, Penang to Singapore.

Vitis glaberrima, *Wall.* 100-4400′, Kunstl. 6212, Fox 151; flr. Oct., fruit June. A long vine of Tenasserim to Sumatra; in Peninsula 2d, 4h, 5h, 8h, 6k, 7l, 9l, 9m.

Vitis Kunstleri, *King.* Larut, Kunstl., fide Ridl. A climber of Lower Siam; in Peninsula 4f, 7g.

Vitis Lawsoni, *King.* 2500-3000′, Kunstl. 6827, Ridl. 5238: flr. July, fruit June. A climber of Burma; in Peninsula 2d, 4f, 5g, 5h, 9m.

Vitis macrostachya, *Miq.* At 100′, Kunstl. 6238; flr. June. A climber of Sumatra; in Peninsula Penang to Singapore.

Vitis mollissima, *Wall.* 3700-3800′, B. & H. 12983; fruit March. A wide climber of Lower Siam; in Peninsula Langkawi to Singapore.

Vitis novemfolia, *Wall.* At Maxwell's Hill, Ridl. 5235; flr. June. A slender vine of Tenasserim; in Peninsula 2d, 3f, 4f, 6f, 7g, 6j, 0j, 6k, 9m.

Vitis pedunculariș, *Wall.* 100-800′, Kunstl. 3970, 5364; fruit March, Dec. A climber of Sumatra and Borneo; in Peninsula 2d, 6d, 5h, 6j, 6k.

Vitis polystachya, *Wall.* 3000-3500′, Scort. 244, Ridl. 2999, H. & N. 2367; flr. March, fruit Feb. A climber of Siam to Sumatra; in Peninsula 2d, 4f, 5h, 6j, 6k, 8l, 9l.

Vitis pyrrhodasys, *Miq.* Larut, Kunstl., fide Ridl. A slender vine of W. Malaysia; in Peninsula 2c, 6c, 2d, 5g, 5h, 6k, 8l, 9l.

Vitis repens, *Wight and Arnott.* At 4400′, Fox 135; flr. Oct. A climber of S. E. Asia; in Peninsula Kedah and Kelantan to Singapore.

Vitis Scortechinii, *King.* 800-1000′, Kunstl. 2897; flr. March. A slender climber, endemic, 6d, 4f, 5h.

Vitis trifolia, *Linn.* 300-4750′, Ridl., B. & H. 12945; fruit March. A vine of India, Lower Siam and Java; in Peninsula common.

Vitis Wrayi, *King.* Taiping Hills, Scort., fide Ridl. A slender climber of Lower Siam; in Peninsula 2d, 3f, 5h, 6j, 6k, 9l.

Pterisanthes coriacea, *Korth.* Up to 4000′, Curt. 2606, Ridl. 3001; flr. May, Sept., Dec. A slender climber of Lower Siam; in Peninsula Taiping to Singapore.

Pterisanthes eriopoda, *Planch.* Taiping Hills, Ridl. (not seen). A slender climber of Sumatra; in Peninsula 2d, 3d, 4f.

Pterisanthes pedata, *Laws.* At 2500′, Haniff 13208; fruit March. A short climber, endemic, 5h, 6j, 6k, 9l.

Leea Curtisii, *King.* At Waterloo, 1800′, Curt. 2872. A shrub up to 5′, endemic, 4d.

Leea gigantea, *Griff.* 100-1000′, Ridl. 14649; flr. Aug. A bush or small tree, endemic, Langkawi to Singapore.

Leea sambucina, *Willd.* At 300′, Wray 3282. A big shrub of India to Sumatra; in Peninsula common.

Leea simplicifolia, *Zoll.* 2000-2500′, Kunstl., fide Ridl. A dwarf shrub, of Sumatra and Java; in Peninsula 4d.

SAPINDACEAE.

Allophyllus glaber, *Roxb.* At Maxwell's Hill, Scort., fide Ridl. A small tree, endemic, common.

Allophyllus ternatus, *Lour.* At 3000′, Scort. 290. A shrub up to 10′, of Indo-China and Malaysia; in Peninsula common.

Erioglossum edule, *Bl.* At Kota, Wray 3344. A tree of Indo-Australia; in Peninsula in villages and open country.

Lepisanthes cuneata, *Hiern.* Larut, Kunstl., fide Ridl. A shrub or small tree, endemic, 2d, 4e, 3f, 4f, 7h, 6j.

Lepisanthes longifolia, *Radlk.* 1500-2000′, Kunstl. 8465; fruit Feb. A shrub up to 20′, endemic, 2d, 6g, 8j, 6k, 7l, 9l.

Otophora sessilis, *King.* 300-800′, Kunstl. 2460; flr. Oct. A shrub or small tree of Lower Siam; in Peninsula 1b, 2d.

Nephelium lappaceum, *Linn.* The Rambutan. A tree up to 50′, of W. Malaysia; in Peninsula cultivated and occurring as an escape.

Nephelium mutabile, *Bl.* 200-500′, Kunstl. 6478; flr. Aug. A small tree of W. Malaysia and Philippines; in Peninsula 6f, 5g, 5h, 9m.

Nephelium ophioides, *Radlk.* Kunstl., Larut, fide Ridl. A tree up to 80′, endemic, 4f, 5h, 6k.

Nephelium rubescens, *Hiern.* At 100′, Kunstl. 6523, 6750; flr. Aug., fruit Oct. A tree up to 60′, endemic, 3f, 4h, 6k, 7l, 9m.

Nephelium setosum, *Ridl.* Euphoria setosa, Radlk. 1000-2000′, Kunstl., fide Ridl. A doubtful species.

Nephelium sp. At 3800′, B. & H. 13008; fruit March. A lofty tree. Near N. glabrum.

Pometia alnifolia, *Radlk.* 500-800′, Kunstl. 3781; flr. Jan. A tree up to 60′, endemic, 2d, 4f, 5h, 9m.

Guioa fuscidula, *Radlk.* 200-500′, Kunstl. 2452; flr. Oct. A tree up to 40′, of Tenasserim; in Peninsula 3e only.

Mischocarpus sumatranus, *Bl.* 100-4000′, Kunstl. 4689, 5391, 8329, Ridl.; flr. Jan., fruit Feb., April. A tree up to 70′, of Indo-Malaya; in Peninsula 2d, 6d, 5h, 9m.

Paranephelium macrophyllum, *King.* 300-500′, Kunstl. 3204, 6436; flr. and fruit Aug. A tree up to 100′, endemic, 4d, 4e, 4f, 0j, 6k, 9m.

STAPHYLEACEAE.

Turpinia latifolia, *Wall.* 200-500′, Wray 2172, Kunstl. 8487; flr. Feb., fruit June. A tree up to 40′, endemic, 2d, 5g, 8g, 5h, 6k, 7k, 9m.

Turpinia pomifera, *DC.* 3000-4000′, Kunstl. 4243; fruit May. A tree up to 40′, of Indo-Malaya and China; in Peninsula 3e only.

SABIACEAE.

Sabia sumatrana, *Bl.* At 1800′, Kunstl. 2117; flr. and fruit July. A climber of Sumatra; in Peninsula 3e only.

Meliosma elliptica, *Hook. fil.* At 100′, Kunstl. 5468; flr. Jan. A tree up to 30′, of Sumatra and Java; in Peninsula 4f, 5h, 6k, 9m.

Meliosma nitida, *Bl.* 500-2500′, Wray 3243, Kunstl. 2707, 2842, 4895, Curt.; flr. Jan., May, fruit March, Sept. A shrub or small tree of Sumatra and Java; in Peninsula 2d, 4f, 3g, 5g, 4h, 5h, 5j, 6k, 9l.

ANACARDIACEAE.

Buchanania sessiliflora, *Bl.* 300-800′, Wray 2402, 2558, 2642, Kunstl. 6593; flr. Sept., fruit Aug. A tree up to 60′, of Burma and W. Malaysia; in Peninsula common.

Bouea microphylla, *Griff.* At 300′, Kunstl. 5531; flr. Feb. A tree up to 80′, of Malaysia; in Peninsula only doubtfully wild at 2d, 8g, 6k, 9m.

Mangifera Griffithii, *Hook. fil.* 300-500′, Kunstl., fide Ridl. A tree up to 100′, endemic, 6k.

Mangifera quadrifida, *Jack.* 200-300′, Kunstl. 8444; flr. Jan. A tree up to 60′, of Borneo; in Peninsula 2d, 8g.

Mangifera longipetiolata, *King.* 2500-3000′, Kunstl. 7266; flr. Feb. A tree up to 60′, endemic and local.

Melanorrhoea aptera, *King.* 300-500′, Kunstl. 3485, 3727; flr. Oct. A tree up to 70′, endemic, 2d, 6g.

Melanorrhoea Curtisii, *Oliv.* 800-1000′, Kunstl. 6887; flr. Nov. A tree up to 80′, endemic, 2c, 2d, 5g.

Melanorrhoea inappendiculata, *King.* Larut, Kunstl., fide Ridl. A tree up to 60′, endemic, 2d.

Melanorrhoea macrocarpa, Engl. 3000-4000′, Curt. 3722; fruit Dec. A tree of Borneo; in Peninsula 3e only.

Melanorrhoea torquata, *King.* At 100′, Kunstl. 5552; flr. Feb. A tree up to 100′, endemic, 3f, 8g, 8j.

Swintonia lurida, *King.* At Kota, Wray, fide Ridl. A small tree, endemic, 6k.

Swintonia spicifera, *Hook. fil.* 300-1500′, Kunstl., fide Ridl., B. & H. A tree up to 100′, endemic, 2c, 2d, 6j, 6k, 7k.

Campnosperma Griffithii, *March.* At 100′, Kunstl. 6541; flr. Sept. A tree about 80′, of Sumatra and Borneo; in Peninsula 6k, 9m.

Rhus perakensis, *Scort.* At 300′, Wray 2316. A slender climber, endemic, 6g.

Melanochyla angustifolia, *Hook. fil.* 300-500′, Kunstl. 3359; flr. Sept. A tree up to 70′, endemic, 2d, 6j, 6k.

Melanochyla bracteata, *King.* At 100′, Kunstl. 5549, 7303; flr. and fruit Feb. A tree up to 80′, endemic, 4f.

Melanochyla densiflora, *King.* At 100′, Kunstl. 5615; flr. Feb. A tree up to 80′, endemic and local.

Melanochyla Kunstleri, *King.* 300-500′, Kunstl. 6810; flr. Nov. A tree up to 100′, endemic and local.

Melanochyla nitida, *King.* 1000-1500′, Kunstl., fide Ridl. A tree up to 100′, endemic, 2d.

Semecarpus lucens, *King.* At 100′, Kunstl. 5470, 6895; flr. Jan., Nov. A tree up to 70′, endemic and local.

CONNARACEAE.

Connarus ellipticus, *King.* At 300′, Wray 1831. (Up to 4200′, Kunstl., fide Ridl.) A climber, endemic, Penang to Singapore.

Connarus oligophyllus, *Wall.* 200-500′, Kunstl. 5613, 8432. flr. Jan., fruit Feb. A climber of Lower Siam; in Peninula 2d, 4f, 7g, 5h, 8h, 6k, 9m.

Connarus villosus, *Jack.* 800-1500′, Wray 1858, Kunstl. 5586; fruit Feb. A liane of Sumatra and Borneo; in Peninsula common.

Ellipanthus gibbosus, *King.* At Waterloo, Curt.; fruit May. A tree up to 16′, endemic, 4f, 5g, 9k, 9l.

Ellipanthus Griffithii, *Hook. fil.* At 300′, Wray 2404. A tree up to 60′, of Borneo; in Peninsula 4f, 6k, 9m.

Rourea anomala, *King.* At Taiping, Haniff 1262; flr. May. A big liane of Lower Siam; in Peninsula 2d, 6d, 4e, 4f.

Rourea rugosa, *Planch.* 300-500′, Kunstl. 8406; flr. Jan. A liane, endemic and common.

Rourea similis, *Bl.* 100-500′, Kunstl. 5516, 8405, flr. Jan., Feb. A liane of Sumatra and Borneo; in Peninsula 2c, 2d, 4f, 5h, 6k, 9k, 9m.

Roureopsis Scortechinii, *King.* 4000-4500′, Curt. 1998, H. & N. 2465; fruit Feb., Sept. A slender climber, endemic and local.

Agelaea pinnata, *King.* At 500′, Kunstl. 5425; flr. Jan. A liane, endemic and local.

Agelaea vestita, *Hook. fil.* 100-300′, Wray 2538, 2549; flr. July. A liane of W. Malaysia; in Peninsula common.

Cnestis ramiflora, *Griff.* At 300′, Kunstl. 3759; fruit Jan. A climber of Indo-Malaya; in Peninsula common.

LEGUMINOSAE.

Crotolaria incana, *Linn.* At Taiping, Hend. 10162; flr. and fruit Feb. A shrubby herb, cosmopolitan; in Peninsula 2d.

Crotolaria semperflorens, *Vent.* At 4100′, B. & H. 12867: flr. and fruit Feb. A herb of S. India, Sumatra and Java; in Peninsula 6j, 6k.

Flemingia congesta, *Roxb.* At Taiping, Hend. 10161; flr. and fruit April. A small shrub of Indo-Malaya and China; in Peninsula common.

Phaseolus calcaratus, *Roxb.* At Batu Kurau, Curt. 2984; flr. Oct. A twining herb of S. E. Asia; in Peninsula 2b, 6b, 6f, 5g.

Spatholobus ferrugineus, *Benth.* At 300′, Kunstl. 3366; flr. Nov. A big liane of W. Malaysia; in Peninsula 2d, 4f, 6k, 8k, 9m.

Spatholobus Maingayi, Prain. 500-800′, Kunstl. 6906; flr. Dec. A climber, endemic, 4f, 6k, 9l, 9m.

Mucuna biplicata, *Teys. and Binn.* At Taiping, Hend. 10136, 10373; flr. Jan., fruit Feb. A liane of Sumatra and Borneo; in Peninsula 1b, 2d, 4d, 6f, 5g, 7k, 9l.

Mucuna pruriens, *DC.* At Kota, Wray 3326; an annual climber, pantropic; in Peninsula 3e only.

Erythrina lithosperma, *Miq.* 1800-3800′, Curt. 2982, B. & H.; flr. Feb., Oct. A tree of Indo-Malaya to Philippines; in Peninsula only doubtfully wild.

Milletia albiflora, *Prain.* 100-300′, Wray 1864, Kunstl. 6842: flr. May, fruit Nov. A tree up to 50′, endemic, 2d, 6e, 3f, 4f, 5h, 6k.

Milletia sericea, *Benth.* Larut, Kunstl., fide, Ridl. A liane of W. Malaysia; in Peninsula 2d, 4f, 5g, 5h, 6k, 9k.

Milletia unifoliata, *Prain.* At Tupai, Wray 2836; fruit Aug. A tree up to 30′, endemic, 3f, 4f.

Padebruggea dasyphylla, *Miq.* At 200′, Wray, fide Ridl. A liane of Java; in Peninsula 3e only.

Dalbergia phyllanthoides, *Bl.* 500-1000′, Wray 2086, Kunstl. 4978, 5182; flr. Oct., fruit Nov. A climber of Java and Borneo; in Peninsula 2d.

Dalbergia tamarindifolia, *Roxb.* At 100′, Kunstl. 6481; flr. Aug. A climber or tree of Indo-Malaya to the Philippines, and China; in Peninsula 1b, 2b, 2c, 2d, 6e, 4f.

Pterocarpus indicus, *Willd.* A tree up to about 80′, of Tenasserim to the Philippines; in Peninsula commonly planted as a roadside tree, and probably wild in 2d, 5h, 6k.

Pongamia glabra, *Vent.* At Taiping, Hend. 10231; flr. Nov. A tree up to 60′, of Indo-Australia and Mascarene Is.; in Peninsula common near the sea.

Derris elegans, *Benth.* 100-500′, Kunstl. 3911, 5583; flr. Feb. A climber, widely Malaysian; in Peninsula 5h, 6k.

Derris elliptica, *Benth.* The Tuba plant, cultivated. Wray 1678. A sprawler of Siam to Borneo, only doubtfully wild in 2b, 2d.

Derris malaccensis, *Prain,* var. aptera. 300-800′, Kunstl. 6428; fruit Aug. A climber of Siam to Borneo; in Peninsula 2d, 4f, 6f, 5g, 9k, the var. only in 3e.

Kunstleria Kingii, *Prain.* 500-1500′, Kunstl. 3830, 6870, 6935; flr. Nov., Dec., fruit Jan. A liane, endemic and local.

Desmodium capitatum, *DC.* At Taiping, Scort., fide Ridl. A creeping shrublet of S. E. Asia; in Peninsula 2b, 3f, 6f, 7g, 5h.

Desmodium heterophyllum, *DC.* At 100′, Kunstl. 2579; flr. Nov. A small herb, of S. E. Asia; in Peninsula 5b, 2d, 8e, 5g, 8h, 6k, 9m.

Desmodium polycarpum, *DC.* Up to 300′, Kunstl. 4984, Ridl., Hend. 10164; flr. April, Oct., fruit Oct. A shrublet of Africa and Indo-Australia; in Peninsula common.

Desmodium virgatum, *Zoll.* At Batu Kurau, Scort., fide Ridl. A small shrub of Burma, Java, Philippines; in Peninsula 3e only.

Ormosia gracilis, *Prain.* At about 3000′, Wray 2979. A tree up to 40′, endemic, 5g.

Ormosia scandens, *Prain.* 300-500′, Kunstl., fide Ridl. A liane, endemic and local.

Cassia alata, *Linn.* At 300′, Hend. 10068; flr. and fruit Jan. A large shrub, pantropic, of S. American origin; in Peninsula common.

Cassia javanica, *Linn.* At Taiping, Wray 2020; flr. March. A tree of W. Malaysia; in Peninsula cultivated only.

Koompassia malaccensis, *Benth.* At Taiping, Wray, Kunstl., fide Ridl. A tree up to 150′, of Sumatra; in Peninsula 2d, 3f, 7g, 6k, 9m.

Dialium patens, *Baker.* At 100′, Kunstl. 5577; flr. Feb. A tree up to 80′, of Borneo; in Peninsula 8g, 6k.

Bauhinia bidentata, *Jack.* 300-500′, Kunstl. 3183; flr. Aug. A liane or shrub of Singapore; in Peninsula, Penang to Johore.

Bauhinia cornifolia, *Baker.* 3000-4300′, Kunstl. 6261, B. & H.; flr. July. A liane, endemic, 2d, 6d, 5g, 6g, 5h, 5j.

Bauhinia ferruginea, *Roxb.* 300-500′, Kunstl. 2508; fruit Nov. A shrub (Kunstl.) or liane (Ridl.), endemic, 2d, 4f, 5h.

Bauhinia Findlaysoniana, *Grah.* Larut, Scort. 1463. A liane of Siam and Borneo; in Peninsula 2d.

Bauhinia flammifera, *Ridl.* At Taiping, Scort. We are of opinion that at least one sheet placed by Mr. Ridley under B. integrifolia, Roxb. is his B. flammifera. The only other sheet seen by us that Mr. Ridley quotes in his Flora is his own from Temengoh (the type of B. holosericea, Ridl.): this differs. Assuming that the type of B. integrifolia, Roxb. agrees with the latter, then the Taiping plant is B. flammifera, which is very common through the Peninsula, extending to Lower Siam.

Bauhinia glauca, *Wall.* At Kota, Wray, Scort., fide Ridl. A small climber of China and W. Malaysia; in Peninsula 2d, 5f, 6f.

Bauhinia lucida, *Wall.* 300-500′, Kunstl. 3434; flr. Oct. A liane, endemic, 2d.

Bauhinia mollissima, *Wall.* 300-800′, Kunstl. 5165; flr. Nov. An erect or climbing shrub of Tenasserim; in Peninsula 2b, 2d.

Bauhinia Wrayi, *Prain.* At Taiping, Wray 1934; flr. May. A small climber, endemic, 5g, 8l.

Saraca bijuga, *Prain.* At 500′, Kunstl. 4059; fruit March. A small tree, endemic, 4d, 4f, 6k.

Saraca declinata, *Miq.* 300-3000′, Kunstl. 2729, 3691; flr. Jan. A tree up to 20′, of Java; in Peninsula 4d, 6f, 5h, 6k.

Saraca macroptera, *Miq.* Larut, Kunstl., fide Ridl. A tree up to 40′, of Sumatra and Borneo; in Peninsula 3e only.

Saraca palembanica, *Miq.* At 100′, Kunstl. 6372; flr. July. A tree up to 40′, of Sumatra; in Peninsula 2d, 3f.

Saraca taipingensis, *Cantley.* Taiping Hills, Cantley, Anders. 99; flr. March. A small tree, endemic, 4f, 5g, 6g, 5h, 6j, 6k.

Saraca triandra, *Baker.* 300-2000′, Kunstl. 3797, 4507, 8516, Ridl. 14678; flr. Aug., fruit Jan. A shrub or tree of Sumatra and Borneo; in Peninsula common from Kedah to Malacca.

Crudia Curtisii, *Prain.* At Taiping, Kunstl., fide Ridl. A tree up to 150′, endemic, 2d, 4f, 5h, 8j, 6k.

Crudia gracilis, *Prain.* At Taiping, Kunstl., fide Ridl. A shrub, endemic and local.

Mezoneuron sumatranum, *Wight and Arn.* At Taiping, Scort., fide Ridl. A prickly climber of Sumatra, Borneo and Philippines; in Peninsula 2d, 3f, 4f, 5h, 6k, 9m.

Caesalpinia parviflora, *Prain.* Larut, Kunstl., fide Ridl. A small tree or climber, endemic and local.

Parkia speciosa, *Hassk.* 100-2000′, Wray, Kunstl. 5300; flr. Dec. A tree up to 80′, of Sumatra and Java; in Peninsula 2d, 5h, 6k, 9m.

Adenanthera bicolor, *Moon.* At Ulu Sapetang, Forest Dept. 233. A tree up to 80′, of Ceylon; in Peninsula 2d, 5h, 6k, 9m.

Entada Schefferi, *Ridl.* At 100′, Kunstl. 6228; fruit June. A liane of Lower Siam and Java; in Peninsula common.

Mimosa pudica, *Linn.* The sensitive plant. Common everywhere in waste ground. Distrib: pantropic, of S. American origin.

Acacia pennata, *Willd.* 300-800′, Kunstl. 5504. A climber of Trop. Africa and Asia; in Peninsula 2b, 2d, 8g, 5h, 6j, 6k.

Pithecolobium affine, *Baker.* 300-500′, Kunstl. 3406; flr. March. A small tree of Burma and ?Borneo; in Peninsula 3f, 5h, 6k, 9m.

Pithecolobium contortum, *Benth.* 500-800′, Wray 2636, 4249, Kunstl. 6869; flr. Nov. A small tree, endemic, 2c, 2d, 3f, 4f, 5h, 7l, 9m.

Pithecolobium Clypearia, *Benth.* At Taiping, Scort. 481. A small tree of Malaysia and S. China; in Peninsula 2d, 8d, 4f, 5h, 8h, 6k, 9m.

Pithecolobium ellipticum, *Hassk.* 200-300′, Wray 2666, Hend. 10043, 10305; flr. Aug., fruit Jan. A small tree of W. Malaysia to the Philippines; in Peninsula 2c, 3d, 3f, 4f, 6k, 9k, 9m.

Pithecolobium lobatum, *Benth.* At 200′, Hend.; fruit Jan., Feb. A tree up to 80′, of Malaysia; in Peninsula common.

ROSACEAE.

Parinarium asperulum, *Miq.* 500-1500′, Kunstl. 3537, 7568; flr. April, fruit Oct. A tree up to 80′, of Sumatra; in Peninsula 2d, 6e, 8g, 9m.

Parinarium elatum, *King.* 500-1000′, Kunstl. 3436, 3711; flr. Oct., fruit Jan. A tree up to 130′, endemic and local.

Parinarium Kunstleri, *King.* 300-800′, Kunstl. 3715, 6917; fruit Dec., Jan. A tree up to 80′, endemic and local.

Pygeum parviflorum, *Teys. and Binn.* 300-3000′, Kunstl. 3791, 6896 (var. densa), 7236; flr. Dec., Jan., fruit Feb. A tree up to 60′, of Java and Borneo; in Peninsula 2d, 4d, 4f, 5h, 6k.

Rubus elongatus, *Smith.* 300-800′, Wray 1849, Ridl. A bramble of W. Malaysia; in Peninsula 5h.

Rubus glomeratus, *Bl.* 3500-4500′, Fox 167, Hervey, Anders. 54, B. & H. 12609, 12778; flr. March, Oct. A bramble of W. Malaysia; in Peninsula 1b, 2d, 5g, 5h, 6j, 9m.

Rubus rosaefolius, *Smith.* 4000-4500′, Wray 4187, Ridl. 5233; flr. and fruit June. A bramble of Africa, Indo-Australia, Japan; in Peninsula 2d, 4e, 4f, 5g, 5h.

Pyrus granulosa, *Bertol.* At 4400′, Fox 153; fruit Oct. A tree up to 100′, of India to Sumatra; in Peninsula 6e, 4f, 5g.

SAXIFRAGACEAE.

Dichroa febrifuga, *Lour.* 2000-3900′, all collectors; flr. Feb., March, Dec., fruit March. A shrub of Indo-Malaya and S. China; in Peninsula 4f, 5h.

Weinmannia Blumei, *Planch.* 3800-4750′, Ridl. 3027, B. & H. 12892; flr. March, fruit Feb. A small tree of Java and ?Borneo; in Peninsula 6e, 5g, 6g, 8g, 7k.

Polyosma conocarpa, *Ridl.* 2500-3800′, Wray, B. & H. 12947; fruit March. A small tree of Sumatra; in Peninsula 1b, 2d, 8g, 8j, 6k, 9m.

Polyosma grandis, *Ridl.* 3500-4000′, Kunstl. 3802; flr. Jan. A tree up to 50′, endemic and local.

LEGNOTIDACEAE.

Gynotroches axillaris, *Bl.* 300-800′, Wray 2501, Kunstl. 5245; flr. Dec. A small tree of W. Malaysia and the Philippines; in Peninsula common.

Pellacalyx axillaris, *Korth.* 200-300′, Kunstl. 3627, Hend. 10173; flr. Dec., fruit June. A shrub or small tree of Sumatra and the Philippines; in Peninsula 2d, 8g, 5h, 6k, 9l, 9m.

Pellacalyx Saccardianus, Scort. At Taiping, Wray 701, Ridl. 3020; flr. Dec. A tree of Borneo; in Peninsula 2d, 4f, 8g, 5h, 5j, 9m.

ANISOPHYLLAEACEAE.

Anisophyllaea apetala, *Scort.* 2000-2500′, H. & N. 2391, B. & H. 12829; flr. March, fruit Feb. A small tree, endemic, 3f, 5h, 6k.

Anisophyllaea Curtisii, *King.* At 2500′, H. & N. 2378; flr. Feb. A small tree, endemic, 2d.

Anisophyllaea disticha, *Baill.* 300-2500′, Wray 17, Curt. 3721; fruit Oct., Dec. A shrub of W. Malaysia; in Peninsula 2c, 2d, 8g, 8j, 8l, 9l, 9m.

Anisophyllaea Gaudichaudiana, *Baill.* 1500-2000′, Wray 2214, Kunstl. 2731, Ridl. 3028; flr. Jan., fruit June. A tree up to 50′, endemic, 2d.

COMBRETACEAE.

Terminalia citrina, *Roxb.* 300-500′, Wray 3173; flr. Aug. A tree or climber of S. India; in Peninsula 2d, 6f, 5h, 6j.

Combretum nigrescens, *King.* Larut, Kunstl., fide Ridl., Forest Dept. 164 (var. Kunstleri). A climber, endemic, the species at 6e, 5h, 6j, the var. at 6g.

Combretum sundaicum, *Miq.* At Taiping, Wray 4272, Haniff 1258; flr. May. A woody climber of W. Malaysia and the Philippines; in Peninsula common.

MYRTACEAE.

Rhodamnia cinerea, *Jack.* 300-1000′, Wray 2325, Kunstl. 6813, H. & N. 2397; flr. Feb., Nov. A small tree of Siam to Australia; in Peninsula common.

Rhodomyrtus tomentosa, *Wight.* 200-500′, Kunstl. 8410; flr. Jan. A shrub of Indo-Malaya to Japan; in Peninsula common.

Eugenia Benjamina, *King.* Up to 2500′, Wray 2623, 2797, 3204; A shrub of Sumatra; in Peninsula 3e only.

Eugenia caudata, *King.* 1800-4700′, Kunstl. 4241, 6262, Curt. 2007, B. & H. 12768; flr. March, May, fruit July. Sept. A tree up to 40′, endemic, 2d, 5h, 6j, 6k, 7k.

Eugenia chlorantha, *Duthie.* 300-1000′, Kunstl. 4082, 4220; flr. April, fruit May. A tree up to 50′, of Sumatra and Borneo; in Peninsula 2d, 5h, 6k, 9m.

Eugenia chloroleuca, *King.* 1500-2000′, Wray 2917. Kunstl. 4951, 7307, Ridl. 11920; flr. Sept., fruit Feb. A tree up to 40′, endemic, 6k, 9m.

Eugenia Clarkeana, *King.* 300-500′, Kunstl. 6822; fruit Nov. A small tree, endemic, 6f, 5h, 8j.

Eugenia corrugata, *King.* 3000-4000′, Kunstl. 5298; fruit Dec. A tree up to 40′, endemic, 5g.

Eugenia cymosa, *Lam.* At 300′, Kunstl. 3422; flr. Oct. A small tree of Indo-Malaya; in Peninsula 1b, 2d, 3f, 6k, 9m.

Eugenia Duthieana, *King.* 500-4300′, Kunstl. 3966, 4218, B. & H. 12759; flr. March, fruit May. A tree up to 50′, endemic, 2c, 2d, 5h, 8h, 6k, 9m.

Eugenia Dyeriana, *King.* 100-500′, Kunstl. 6196, 6767; flr. June, fruit Oct. A tree up to 70′, endemic and local.

Eugenia expansa, *Duthie.* 100-2500′, Wray 3199, Kunstl. 5483; flr. Jan. A shrub or tree, endemic, 2d, 4f, 5h, 6k, 9m.

Eugenia filiformis, *Wall.* 100-2500′, Kunstl. 6708, Ridl. 2991; flr. Feb., Oct. A spreading tree, endemic, Penang to Singapore.

Eugenia Gageana, *King.* At 100′, Kunstl. 7563; flr. May. A tree up to 50′, endemic and local.

Eugenia garcinifolia, *King.* 300-500′, Kunstl. 6974; flr. Dec. A tree up to 80′, of Sumatra; in Peninsula 4f.

Eugenia grata, *Wight.* At 100′, Kunstl. 5414, 5433; flr. Jan. A shrub or small tree of Indo-Malaya; in Peninsula 1b, 2d, 3f, 7l. 2d, 3f, 7l.

Eugenia Hoseana, *King.* 300-500′, Wray 2952, Kunstl. 3407; flr. Sept. A tree up to 40′, endemic, 9l.

Eugenia Hullettiana, *King.* 500-800′, Kunstl. 7470; flr. April. A small tree of Sumatra; in Peninsula 3e only.

Eugenia inophylla, *Roxb.* Larut, Kunstl., fide Ridl. A tree up to 50′, endemic, 1a, 1b, 2d, 4f, 8h.

Eugenia Koordersiana, *King.* 500-1000′, Kunstl. 6233; flr. June. A tree up to 80′, endemic?, local.

Eugenia Kunstleri, *King.* Up to 800′, Kunstl. 3310; flr. Sept. A tall tree, endemic, 2d.

Eugenia lineata, *Duthie.* 300-500′, Wray 1973, Kunstl. 4086, Haniff 13121; flr. March, April. A tree up to 60′, of W. Malaysia; in Peninsula common.

Eugenia mollis, *King.* At 100′, Kunstl. 8387; flr. Jan. A shrub, endemic and local.

Eugenia myrtifolia, *Roxb.* At 100′, Wray 2703, Kunstl. 8379; flr. Jan., Aug. A bushy tree of Indo-Malaya; in Peninsula 8g, 8h, 7l, 9l, 9m.

Eugenia nigricans, *King.* At 1000′, Wray, fide Ridl. A tall tree, endemic and local.

Eugenia pachyphylla, *Kurz.* At 2000′, Curt., fide Ridl. A tree of Burma; in Peninsula 6k.

Eugenia papillosa, *Duthie.* 100-400′, Kunstl. 2813; flr. Feb. A lofty tree, endemic, 5h, 6k, 9m.

Eugenia penangiana, *Duthie.* 1000-1500′, Kunstl. 6965; fruit Dec. A tree up to 80′, endemic, 2d, 5h, 6k.

Eugenia perakensis, *King.* At 100′, Kunstl. 5595; flr. Feb. A tree up to 70′, endemic, 3f, 4f.

Eugenia polita, *King.* Larut, Kunstl., fide Ridl. A shrub or small tree, endemic, 3f, 6k, 9k.

Eugenia polyantha, *Wight.* 200-3000′, Wray 2587, 2958, Kunstl. 6614; flr. Sept. A tree up to 70′, of Indo-Malaya; in Peninsula 2b, 2d, 4f, 6f, 6g, 5h, 6k, 9m.

Eugenia Prainiana, *King.* 100-1000′, Kunstl. 3526 (var. Pearsoniana), 5309, 6584; flr. Oct., fruit Sept., Dec. A tree up to 80′, endemic and local.

Eugenia pseudo-formosa, *King.* 3000-4000′, Kunstl. 6254; flr. July. A small tree of Sumatra; in Peninsula 1b, 2d, 5h, 9m.

Eugenia punctulata, *King.* 300-2000′, Kunstl. 6611, 6937; flr. Sept., fruit Dec. A tree up to 50′, of Borneo; in Peninsula 5g, 7g, 8g, 5h, 6k, 9m.

Eugenia pustulata, *Duthie.* 300-800′, Kunstl. 6758, 7536; flr. April. A small tree, endemic, 6c, 2d, 6k, 9m.

Eugenia quadrata, *King.* At 100′, Kunstl. 5547; flr. Feb. A small tree, endemic and local.

Eugenia setosa, *King.* 100-300′, Kunstl. 5266, 6202; flr. June, Dec. A shrub or climber, endemic and local.

Eugenia subdecussata, *Duthie.* 300-500′, Kunstl. 3752; fruit Jan. A shrub or small tree, endemic, Kedah to Singapore.

Eugenia subhorizontalis, *King.* At Taiping, Wray 2118; flr. June. A small tree of Sumatra; in Peninsula 3e only.

Eugenia tecta, *King.* Up to 500′, Kunstl. 1863; flr. June. A small tree, endemic and local.

Eugenia Thumra, *Roxb.*, var. penangiana, *King.* At 4000′, B. & H. 12860; flr. Feb. A tree of Burma (the species); in Peninsula the var. at 2d, ?3f.

Eugenia valdevenosa, *Duthie.* 300-4100′, Scort. 315, Kunstl. 2737, 5122, Ridl. 5347, H. & N. 2467; flr. Feb., June, fruit Jan., March. A tree up to 20′, endemic, 2d, 5g, 5h, 6k, 9l.

Eugenia variolosa, *King.* 300-800′, Kunstl. 2796, 3995; flr. March, Oct. A small tree, endemic, 4f, 4g, 5h, 7j, 8l, 9l, 9m.

Eugenia zeylanica, *Wight.* 300-500′, Kunstl. 5904; flr. April. A bushy tree of Indo- Malaya; in Peninsula common.

Barringtonia macrostachya, *Kurz.* 500-800′, Kunstl. 3779; fruit Jan. A shrub or tree of Burma and Borneo; in Peninsula 1b, 2b, 2c, 6k, 0k, 9m.

Barringtonia pauciflora, *King.* 1500-2000′, Kunstl. 6355; flr. July. A tree up to 40′, endemic and local.

Barringtonia Scortechinii, *King.* 4000-4300′, Hervey 300, B. & H. 12762; fruit March. A tree up to 60′, endemic, 2d, 5g, 5h, 6k.

Barringtonia sumatrana, *Miq.* ? H. & N. 2468 (determination doubtful). A tree of W. Malaysia; in Peninsula 2d, 7g, 9k, 9l, 9m.

MELASTOMATACEAE.

Osbeckia perakensis, *Ridl.* G. Hijau, Mrs. Bland. A shrub, endemic and local.

Melastoma imbricatum, *Wall.* 2000-4000′, Curt., Ridl. 2934; flr. May, Sept. A large shrub of Indo-China and Sumatra; in Peninsula 2d, 3f, 6g, 5h.

Melastoma malabathricum, *Linn.* 100-4300′, Ridl., Hend. 10013, Haniff 13104, B. & H. 12622; flr. Jan., March. A shrub of Indo-Australia and the Mascarene Is.; in Peninsula common in the North.

Melastoma perakense, *Ridl.* 1000-4700′, all collectors; flr. Jan., Feb., June, July. A shrub of Lingga and Java; in Peninsula 4f, 5g, 8g, 5h, 7l.

Melastoma sp. 2000-4300′, Ridl. 2935, Anders. 1, B. & H. 12580; flr. March. A shrub up to 12′. Near M. molle.

Oxyspora floribunda, *Ridl.* 3000-4500′, Ridl. 2940, 5342, B. & H. 12946; flr. March, June. A large shrub, endemic and local.

Oxyspora stellulata, *King.* Anders. 70; flr. March. A large shrub or tree of Sumatra; in Peninsula 6d, 4e, 4f, 5g.

Allomorphia alata, *Scort.* 200-3000′, Kunstl. 2047, Curt. 3719, Ridl. 11435, Hend. 10057; flr. all the year. A small shrub, endemic, 6c, 6d, 6e, 4f, 5h.

Allomorphia exigua, *Bl.* At Waterloo, Ridl. 2946 (var. capillaris); fruit March. A small shrub, endemic, 4d, 3f, 9k, the var. at 4d, 3f.

Blastus Cogniauxii, *Stapf.* 4000-4500′, Wray 2984, Curt., Ridl. 2947, Anders. 10, B. & H. 12618, 12859; flr. Feb., March. A shrub of Borneo; in Peninsula 4d, 6d, 6e, 4f, 6f, 5g, 5h, 9k, 9l.

Phaulanthus Curtisii, *Ridl.* 100-4000′, Curt. 2014, 2986, 3715, Ridl. 14688, Hend. 10452; flr. Feb., Aug.--Dec. A small shrub, endemic, 2d, 4d, 4e.

Campimia Wrayi, *Ridl.* 2000-4000′, Curt. 2008, Ridl. 2948, 5197; flr. Feb., June, Sept., fruit June, Sept. A small shrub, endemic and local.

Sonerila begoniaefolia, *Bl.* 4000-4500′, Ridl., Hervey. A herb of W. Malaysia; in Peninsula, Penang to Singapore.

Sonerila brachyantha, *Stapf.* At 4000′, Ridl. 2945; flr. and fruit March. A small herb, endemic, 4e, 6e, 3f, 4f, 5h.

Sonerila bracteata, *Stapf.* 3200-4700′, Scort. 12a, Kunstl. 2133, Anders. 35, B. & H. 12853; flr. Feb., March, July, fruit March, July, Oct. An erect herb, endemic, 5g, 5h, 8k.

Sonerila erecta, *Jack.* 300-4750′, all collectors; flr. Feb., March, Sept., fruit Feb., March. A herb, endemic, 2d, 4f, 5g, 9k.

Sonerila glabriflora, *Stapf.* At 100′, Kunstl. 1955, 2128; flr. and fruit June, July. A small herb, endemic, 4f.

Sonerila heterostemon, *Naud.* 200-2500′, Ridl. 11436, Hend. 10027, 10180; flr. and fruit June, Dec. A small herb of Sumatra and Borneo; in Peninsula Taiping to Singapore.

Sonerila integrifolia, *Stapf and King.* 1800-4500′, Kunstl. 2004, 2161, Fox, Ridl. 2943, B. & H. 12747, 13011; flr. March, fruit Aug., Oct. An erect herb, endemic, 5g, 5h.

Sonerila nidularia, *Stapf.* 300-1000′, Curt., Hend. 10193, 10427, 10448; flr. Feb., May, June, Oct., fruit June. A small herb, endemic, 3f, 6g.

Sonerila picta, *Korth,* var. concolor, *Ridl.* 2000-3000′, Curt. 3720; fruit Dec. A succulent herb of W. Malaysia; in Peninsula the var. at 6e, 4f, 5g, 6g, 5h, 7k.

Sonerila repens, *Stapf.* 2000-4000′, all collectors; flr. Feb., March, Dec., fruit Feb., July, Dec. A fleshy herb, endemic, 4f.

Sonerila succulenta, *Stapf.* At 3000′, Ridl. 2942; flr. and fruit Feb. A succulent herb, endemic and local.

Phyllagathis Griffithii, *King.* 500-3000′, Curt. 2012, Haniff 13130, B. & H.; flr. March, Sept. A creeping herb, endemic, 4f, 5h, 5j, 6k.

Phyllagathis hispida, *King.* 4500-4700′, Fox, Anders. 23, B. & H. 12880; flr. Feb., March, Oct. A woody herb, endemic, 5c, 3d, 6e, 4f, 5g, 9k.

Phyllagathis rotundifolia, *Bl.* 200-4500′, Kunstl. 2728, Curt. 2013, Ridl. 2936, Hend. 10437; flr. Jan.-March, Sept., fruit Jan., Feb. A creeping herb of Sumatra; in Peninsula common.

Marumia nemorosa, *Bl.* 4000-4300′, Ridl., B. & H. 12599; flr. March. A climber of Tenasserim, Sumatra and Borneo; in Peninsula common.

Dissochaeta annulata, *Hook. fil.* At 2500′, Ridl.; flr. June. A climber of Borneo; in Peninsula 2d, 7k, 9k, 9l, 9m.

Dissochaeta anomala, *King.* ?Larut, Kunstl., fide Ridl. A climber, endemic, 6d. Possibly Kunstler's Ulu Bubong specimens are what Ridley means here, as he does not quote them in his Flora.

Dissochaeta celebica, *Bl.* 100-500′, Kunstl. 2468, Curt. 2725; flr. May, fruit May, Oct. A slender climber of Bangka to the Philippines; in Peninsula common.

Dissochaeta gracilis, *Bl.* Up to 3200′, Curt., Anders. 5, Haniff 13267, B. & H. 12784; flr. March, May, Dec., fruit March, Dec. A slender climber of W. Malaysia; in Peninsula 4d, 6d, 4e, 4f, 5g, 6g, 5h, 7l, 9m.

Dissochaeta intermedia, *Bl.* At 4500′, Fox 178; flr. Oct. A slender climber of Java; in Peninsula 2d, 6g, 5h, 7l, 9m.

Dissochaeta pallida, *Bl.* 1000-4500′, Kunstl. 8499, Fox 178, Ridl. 5241, B. & H. 12941; flr. Feb., June, Oct., fruit March, June. A climber of W. Malaysia; in Peninsula 5c, 2d, 3f, 4f, 6g, 4h, 5h, 9m.

Anplectrum divaricatum, *Triana.* 100-2000′, Curt. 2009, Ridl.; flr. Sept. A climber of W. Malaysia; in Peninsula 2d, 5g, 5h, 5j, 6j, 6k.

Anplectrum glaucum, *Triana.* 300-400′, Curt.; flr. Oct. A climber of W. Malaysia; in Peninsula 2d, 4d, 6j, 6k, 7k.

Anplectrum pallens, *Bl.* var. petiolare, *Ridl.* 100-2000′, Derry, Curt., Ridl. 11444, H. & N. 2302; flr. Sept., fruit Jan., Feb., Nov., Dec. A slender climber of Sumatra and Borneo; in Peninsula, the species at 2d, the var. common.

Medinilla Clarkei, *King.* At Maxwell's Hill, Burkill, (abnormal leaf only). An epiphyte of Sumatra; in Peninsula 4d, 4e, 4f, 5g, 5h, 7k, 9k.

Medinilla crassinervia, *Bl.* At 300′, Wray 1821. An epiphyte of Borneo to N. Guinea; in Peninsula 2d, 6e, 4f, 5g, 6k, 9m.

Medinilla Hasseltii, *Bl.* 500-3000′, Kunstl. 1961, 8507, Curt. 2715, 3448, Ridl.; flr. Feb., June, Dec., fruit May. A small epiphyte of W. Malaysia; in Peninsula 4d to 9m.

Medinilla heteranthera, *King.* 3000-4500′, Kunstl. 3644, Ridl. 5346, Derry, B. & H. 12952; flr. June, fruit March. An epiphyte, endemic, 4f, 5g.

Medinilla scandens, *King.* 200-2000′, Ridl. 2933, Hend. 10393; flr. Jan, Nov., fruit Nov. A creeper on trees, endemic, 4f.

Medinilla Scortechinii, *King.* 4000-4500′, Wray 1739, Curt., Anders. 16, Derry; flr. March, Oct., fruit March. An epiphyte, endemic, 4f, 5g, 5h.

Medinilla speciosa, *Bl.* Up to 3000′, Wray 3218, Curt. 2011, Derry; flr. Sept., fruit Oct. A large shrub of W. Malaysia; in Peninsula 2d, 4f, 5g.

Medinilla venusta, *King.* Taiping Hills, Kunstl., fide Ridl. (the species). At 3500′, Ridl., B. & H. 12928 (var. chionantha); flr. Feb., March. An epiphyte, endemic, 4f, 5g.

Pogonanthera pulverulenta, *Bl.* Larut Hill, Derry. A shrub of W. Malaysia; in Peninsula 6b, 2d, 3f, 8h, 9j, 6k, 9m.

Astronia smilacifolia, *Triana.* 1800-2000′, Kunstl. 2027, Ridl. 11921; flr. Feb., fruit July. A small bushy tree of Borneo; in Peninsula 2d, 4e.

Pternandra capitellata, *Jack.* At 600′, Hend. 10087; flr. Jan. A bushy tree of Tenasserim; in Peninsula 2d, 3f.

Pternandra coerulescens, *Jack.* At Taiping, Ridl. 14686; fruit Aug. A small tree of W. Malaysia; in Peninsula common in low country in the West.

Pternandra echinata, *Jack.* var. pubescens, *King.* 300-500′, Wray 2354, Kunstl. 3518; fruit Oct. A bushy tree of W. Malaysia; in Peninsula the species common, the var. at 6c, 2d, 5h, 6k.

Memecylon acuminatum, *Sm.* 300-800′, Kunstl. 3458; fruit Oct. A tree, endemic, 2d, 5g, 9j, 6k, 7k, 8k, 8l, 9m.

Memecylon amplexicaule, *Roxb.* 200-1800′, Wray 1964, 2326, 3278, Kunstl. 3058, Curt. 1294, Ridl. 14687; flr. Aug., Dec., fruit June. A small tree, endemic, Penang to Singapore.

Memecylon caloneuron, *Miq.* 800-1000′, Kunstl., fide Ridl. Wray 3235. A tree of W. Malaysia; in Peninsula 1b, 3f, 9l.

Memecylon Curtisii, *Burkill and Henderson,* nom. nov. *M. gracilipes, Ridl.* At Waterloo, 1000′, Curt., fide Ridl. A small tree, endemic and local. Ridley's name is preoccupied by M. gracilipes, C. B. Rob. (1911), a Philippine plant.

Memecylon dichotomum, *Clarke.* 1000-4000′, Wray 2989, Kunstl. 5036, 5297, Curt. 1295, Ridl. 2938; fruit Oct., Dec. A slender shrub, endemic, 2c, 6e, 6f, 5g, 6g, 5h, 5j, 7j, 6k.

Memecylon epiphyticum, *King.* 800-2500′, Kunstl. 5184, Ridl.; flr. June, fruit Nov. An epiphytic shrub, endemic and local.

Memecylon floridum, *Ridl.* 500-1000′, Kunstl., fide Ridl. A tree up to 50′, endemic and local.

Memecylon fruticosum, *King.* 200-500′, Kunstl. 2971, 3625; flr. April, Aug. A shrub, endemic, 5g, 5h.

Memecylon garcinioides, *Bl.* At 3000′, Wray 2961, 3203; flr. Aug. A small tree of W. Malaysia; in Peninsula common.

Memecylon heteropleurum, *Bl.* 500-800′, Kunstl. 6621. A shrub or small tree of Sumatra and Borneo; in Peninsula 4f, 6f, 6g, 5h, 6k, 9m.

Memecylon Kunstleri, *King.* At Changkat Serdang, Wray, fide Ridl. A tree, endemic, 4f, 5h.

Memecylon laevigatum, *Bl.* 500-2500′, Kunstl. 3768, Ridl.; flr. Jan., June. A shrub or small tree of Indo-Malaya; in Peninsula 5g, 5h, 6k, 9l, 9m.

Memecylon minutiflorum, *Miq.* 2500-3000′, Wray 3240, Kunstl. 6265; fruit July. A tree of Sumatra; in Peninsula common.

Memecylon myrsinioides, *Bl.* 300-800′, Wray 2258, Kunstl. 3517; fruit Oct. A shrub or small tree of W. Malaysia; in Peninsula common.

Memecylon oligoneuron, *Bl.* Larut Hills, Kunstl., fide Ridl. A small tree of Java, Borneo and the Philippines; in Peninsula 2d, 4f, 5f, 0j, 6k.

Memecylon Wallichii, *Ridl.* Kunstl. (Larut), Curt. (Waterloo), fide Ridl. A shrub or small tree, endemic, 2d.

LYTHRACEAE.

Crypteronia Griffithii, *Clarke.* 800-1500′, Wray 2638, 2589, Kunstl. 4152; flr. April. A tree, endemic, 2d, 6f, 5h, 6k.

Duabanga sonneratoides, *Ham.* At Waterloo, Curt.; flr. May. A lofty tree of Himalaya to China; in Peninsula 1a, 2d, 4f, 6f, 5g, 5h, 6k.

SAMYDACEAE.

Casearia Clarkei, *King,* var. Kunstleri, *Ridl.* 800-1000′, Kunstl. 6936; fruit Dec. A tree up to 80′, endemic, the species Penang to Singapore, the var. at 4e, 4f, 9k.

Casearia coriacea, *Vent.* At 4300′, B. & H. 12871; fruit Feb. A small tree of Java and Borneo; in Peninsula 4f, 9m.

Casearia Lobbiana, *King.* 800-1800′, Wray 2594, Kunstl. 2631, Curt.; flr. Jan., fruit July, Sept. A shrub or small tree of Lower Siam; in Peninsula 2d, 5h, 6k, 8l, 9m.

Homalium propinquum, *Clarke.* 800-1500′, Kunstl. 4883; flr. Sept. A tree up to 100′, endemic, 2d, 4g.

PASSIFLORACEAE.

Passiflora foetida, *Linn.* At 200′, Hend. 10067; flr. and fruit Jan. A climber, pantropic, of S. American origin; in Peninsula common in waste ground.

Passiflora Horsfieldii, *Bl.* At 500′, Haniff 13135; flr. March. A slender climber of Java; in Peninsula 4f, 6f.

Adenia acuminata, *King.* 600-3000′, Wray 1745, Hend. 10422; fruit Oct. A slender climber of Sumatra and Java; in Peninsula, Taiping to Malacca.

Adenia nicobarica, *King.* At 3000′, Ridl., H. & N. 2352, Hend. 10120; fruit Jan., Feb., Dec. A slender climber of Tenasserim and Lower Siam; in Peninsula 1a, 1b, 2d, 3f, 6f, 5h, 8k.

CUCURBITACEAE.

Hodgsonia capniocarpa, *Ridl.* 100-500′, Kunstl. 4021; flr. March. A wide climber of Indo-Malaya; in Peninsula 2d, 6g, 7g, 6k.

Trichosanthes celebica, *Cogn.* At 500′, Kunstl. 4033; fruit March. A slender climber of Celebes; in Peninsula 3f, 6f, 6k, 7l, 9m.

Trichosanthes tricuspidata, *Lour.* 200-500′, Kunstl. 5111; fruit Nov. A slender climber of Indo-China, Siam, Java, Borneo; in Peninsula 2d, 4e, 7g.

Trichosanthes Wawraei, *Cogn.* 1000-2500′, Kunstl. 2203, 5280; fruit Dec. A slender climber, endemic, 2d, 4f, 8g, 6k, 8l, 9m.

Gymnopetalum integrifolium, *Kurz.* At 300′, Wray. fide Ridl. A creeping herb of Indo-China and Java; in Peninsula 6d, 3f.

Momordica Clarkeana, *King.* At 300′, Wray 3273. A climber, endemic and local.

Melothria affinis, *King.* 100-1500′, Kunstl. 2539, Curt.; fruit May, Nov. A climbing herb of Borneo; in Peninsula 6d, 4e, 3f, 5g, 5h, 8h, 6k, 7l.

BEGONIACEAE.

Begonia hirtella, *Link.* 3400-3800′, B. & H. 12811, 12997; flr. March. A herb, native of S. America, occurring here as an escape.

Begonia Maxwelliana, *King.* 2300-4300′, B. & H. 12569, 12755, 12803; flr. March. A herb, endemic, 2d, 4f.

Begonia taipingensis, *King.* Taiping, Wray, Scort., Kunstl., fide Ridl. A long creeping herb, endemic, 5g, 5h.

UMBELLIFERAE.

Hydrocotyle asiatica, *Linn.* At 4750′, B. & H. A herb of the tropics and sub-tropics of the Old World; in Peninsula common.

Hydrocotyle javanica, *Thunb.* 3700-4000′, Curt. 2086, B. & H. 12912; fruit Sept. A creeping herb of Indo-Australia, China, Japan; in Peninsula 4d, 4f, 5g.

Hydrocotyle rotundifolia, *Roxb.* At 3700′, B. & H. 12915; flr. Feb. A creeping herb of Indo-Malaya; in Peninsula 9m.

Eryngium foetidum, *Linn.* At 3500′ on banks, Hend., B. & H.; flr. March. A foetid herb of S. American origin; in Peninsula common.

ARALIACEAE.

Aralia ferox, *Miq.* 2000-4000′, Kunstl. 5089, Ridl. 5230, B. & H.; flr. June, fruit Oct. A climber of Java and Borneo; in Peninsula 6e, 4f, 5g.

Schefflera affinis, *Viguier.* Larut Hills, Kunstl., fide Ridl. A shrub, endemic, 5h.

Schefflera elliptica, *Harms.* 200-4400′, Wray 2136, Kunstl. 2541, Ridl., B. & H. 12673; flr. March, fruit June, Nov. A scandent shrub of Tenasserim and Java; in Peninsula 1b, 2b, 2d, 5h, 8h, 9m.

Schefflera Hullettii, *Viguier.* At 300′, Wray 2323. An epiphytic or terrestrial shrub, endemic, 4g, Johore, 9m.

Schefflera lurida, *Ridl.* 3500-4000′, Ridl.; fruit Dec. An epiphytic shrub, endemic, 4f.

Schefflera Ridleyi, *Viguier.* At 3600′, B. & H. 12976; flr. and fruit March. An epiphytic shrub, endemic, common.

Schefflera scandens, *Viguier.* At 300′, Curt. 2687; fruit May. A slender climber of Sumatra and Java; in Peninsula 4f.

Schefflera subulata, *Viguier.* 300-2900′, Ridl., Hend. 10081, B. & H. 12689; flr. Jan.-March. An epiphyte of W. Malaysia; in Peninsula common.

Schefflera tomentosa, *Viguier.* Wray 3152; flr. Sept. A shrub of Sumatra and Java; in Peninsula 3f, 4g, 4h, 5h, 9l.

Trevesia cheirantha, *Ridl.* 200-300′, Wray 2332, Hend. 10064; flr. June, fruit Jan. Small prickly tree of Burma and Sumatra; in Peninsula common.

Arthrophyllum ovalifolium, *Miq.* At 200′, Hend. 10123; fruit Jan. A small tree of Tenasserim and Sumatra; in Peninsula common.

Brassiopsis palmata, *Kurz.* At 2900′, Ridl. 3018, B. & H. 13030; fruit Feb., March. A small prickly tree of India and Lower Siam; in Peninsula 4e, 4f.

CORNACEAE.

Mastixia bracteata, *Clarke.* Larut, Kunstl., fide Ridl. A tree up to 60′, endemic, 6k.

Mastixia rostrata, *Bl.* At 4000′, Fox; flr. Oct. A tall tree of Java; in Peninsula 2d, 6k.

Alangium rotundatum, *Ridl.*, n. sp. 1000-3800′, Curt. 2689, B. & H. 12851; flr. Feb., May. A tree, endemic and local.

Aralidium pinnatifidum, *Miq.* 100-300′, Wray 3155. A small tree of Sumatra and Borneo; in Peninsula 2b, 6f, 5g, 5h, 6k, 7l, 9m.

CAPRIFOLIACEAE.

Viburnum sambucinum, *Bl.* At about 3800′, Ridl., B. & H. 12992; flr. March, June. A shrub or small tree of W. Malaysia; in Peninsula common.

RUBIACEAE.

Sarcocephalus Junghuhnii, *Miq.* At Taiping, Kunstl., fide Ridl. A small tree of Indo-China to the Philippines; in Peninsula common.

Nauclea peduncularis, *G. Don.* 300-3000′, Wray 3197, Kunstl. 3578; flr. Nov. A tree of Siam and Borneo; in Peninsula, 2d.

Uncaria attenuata, *Korth.* Wray 3150. A slender climber of Indo-Malaya; in Peninsula 5c, 6c, 2d, 6k, 9m.

Uncaria dasyoneura, *Korth.* Larut, Kunstl., fide Ridl. A climber of Ceylon and Java; in Peninsula 2d, 5g, 6k.

Uncaria ferrea, *DC.* 300-800′, Scort. 130, Kunstl. 5390; flr. Jan. A slender climber of Indo-Malaya; in Peninsula 6e, 2d, 6d, 6f, 8g.

Uncaria Kunstleri, *King.* At 100′, Kunstl. 5376; flr. and fruit Dec. A climbing shrub, endemic and local.

Uncaria pedicellata, *Roxb.* Larut, Kunstl., fide Ridl. A climber of W. Malaysia; in Peninsula common in open country.

Uncaria Roxburghiana, *Korth.* Larut, Kunstl., fide Ridl. A slender climber of Sumatra and Borneo; in Peninsula 5g, 5h, 9m, 0m.

Uncaria sclerophylla, *Roxb.* 100–4400′, Derry, Hend. 10222, B. & H. 12944; flr. March, fruit Nov. A liane of W. Malaysia; in Peninsula common.

Uncaria trinervis, *Hav.* At 300′, Kunstl. 2981; fruit Oct. A slender climber, endemic, 2d.

Wendlandia paniculata, *DC.* 3800-4100′, H. & N. 2349. B. & H. 12854, 12984; flr. Feb., March. A small tree of Indo-Malaya and China; in Peninsula 3e only.

Greenia Jackii, *Wight and Arn.* At about 1000′, Ridl.; flr. June. A shrub or small tree, endemic, from Langkawi to Malacca.

Argostemma diversifolium, *Ridl.* Up to 4000′, Anders. 92, 102; flr. March. A succulent herb, endemic, 4d.

Argostemma elatostemma, *Hook. fil.* var. obovata, *King.* 2000-4500′, Curt., Fox, Ridl., Hervey, Anders. 100; flr. March, May, June, Oct. A creeping herb, endemic, 2d, 5g, 6j, 9k.

Argostemma involucratum, *Hemsl.* 2000-4700′, Wray 696, Ridl. 11445 (var. glabrum), 2927, 11953 (var. hirsutum); flr. Feb. A creeping herb, endemic, common in the hills.

Argostemma nutans, *King.* Larut, Kunstl., fide Ridl. A succulent herb, endemic, 4f.

Argostemma pictum, *Wall.* 2000-3800′, Ridl., B. & H. 12687, 12949, 13200; flr. March. A succulent herb of Tenasserim and Lingga; in Peninsula 1b, 2d, 6e, 4f, 5h, 9l.

Argostemma spinulosum, *Clarke.* 2000-4000′, Wray 2953, Curt., Ridl. 2926, Anders. 123, B. & H. 13010; flr. March, May. A herb, endemic, 4f, 5g, 5h, 6j, 9k, 9l.

Argostemma unifolioide, *King.* 2300-4500′, Wray 2814, Ridl. 11448, Hose 40; flr. Aug., fruit Dec. A tuberous herb, endemic, 4f.

Ophiorrhiza communis, *Ridl.* At 3000′, Wray 2059, Curt.; flr. May. A herb of Borneo; in Peninsula, Kedah to Malacca.

Ophiorrhiza discolor, *R. Br.* 100-4500′, Ridl.; flr. Feb., Aug. A herb, endemic, 2d, 6e, 5h, 6k, 7l, 9m.

Ophiorrhiza major, *Ridl.* Taiping Hills, Ridl. (not seen). A woody herb, endemic, common.

Ophiorrhiza pallidula, *Ridl.* At 300′, Wray 1984. A herb, endemic, 4e, 6e, 5g, 5h.

Ophiorrhiza tenella, *King.* At about 4500′, Ridl.; flr. March. A herb, endemic, 2c, 4e, 6g, 8g, 5h.

Hedyotis capitellata, *Wall.* 200-4000′, Ridl., Anders. 84, Hend. 10065, 10373, 10434; flr. Jan., March. A climbing shrub of Malaysia; in Peninsula common.

Hedyotis congesta, *Wall.* At 1000′, Hend. 10017, 10194; flr. June, fruit Feb. A shrubby herb of Tenasserim, Sumatra and Borneo; in Peninsula common.

Hedyotis coronata, *Wall.* At about 4500′, Ridl. A wiry herb of Burma and Siam; in Peninsula 1b, 2b, 4d, 6d, 4e.

Hedyotis hispida, *Retz.* Taiping Hills, Ridl.; flr. Feb. A herb of Indo-Malaya, China and Japan; in Peninsula 2d, 6d, 4f, 6f, 6k.

Hedyotis mollis, *Wall.* At 3800′, B. & H. 12940; flr. March. A slender climber, endemic, 2d, 6d, 5j.

Oldenlandia Heynei, *Don.* 100-300′, Ridl., Hend. 10235, 10236; flr. Nov., fruit Aug. A wiry herb of Java; in Peninsula 2d, 3f, 7l, 9m.

Lucinaea membranacea, *King.* 2000-4000′, Curt. 1337, 2016, Ridl. 5543; flr. Feb., May, June, Sept. An epiphytic climber of Borneo; in Peninsula 4f, 5g, 7l, 9m.

Lucinaea morinda, *DC.* 100-4500′, Kunstl. 5498, 8482, Curt.; flr. Jan., Feb., Sept. A sprawler of W. Malaysia; in Peninsula 4f, 5h, 8h, 6k, 9l, 9m.

Lucinaea Ridleyi, *King.* 1500-3600′, Kunstl. 2162, Ridl. 2923, 11441, B. & H. 12942, 13203; flr. March, Aug. fruit Dec. An epiphytic climber of Borneo; in Peninsula 4f, 5g.

Mussaenda glabra, *Vahl.* 4000-4400′, Anders. 59, B. & H. 12623; flr. March. A bush or climber of Indo-Malaya; in Peninsula, Taiping to Singapore.

Mussaenda mutabilis, *Hemsl.* 200-2000′, Wray 91, 1846, Curt. 2023, Ridl. 14332; flr. July, Sept. A sprawler, endemic, Taiping to S. Johore.

Mussaenda oblonga, *King.* Larut, Kunstl., fide Ridl. A shrub of Tavoy; in Peninsula 4d, 4e, 4f, 6f, 5g, 6k.

Mussaenda villosa, *Wall.* At 2000′, Curt. 2024; fruit Sept. A shrub of Siam and Borneo; in Peninsula 1b, 2b, 6c, 2d, 6d, 4e, 5g, 7k.

Mussaenda Wrayi, *King.* 100-1000′, Wray 2583, Kunstl. 1960, Hend. 10025, 10182; flr. Jan., June, fruit June. A scandent shrub, endemic, 2d, 5g, 5h.

Mycetia flava, *Ridl.* At 2000′, Curt. 2021; flr. Sept. A small shrub, endemic, 4f.

Aulacodiscus premnoides, *Hook. fil.* 500-800′, Wray 2562, 2665, Kunstl. 2392; flr. July, Sept. A tree up to 40′, endemic, 2d, 4f, 5g, 5h, 5j, 8j, 9l, 9m.

Urophyllum ferrugineum, *King and Gamble.* 2000-4000′, Curt. 2017, 3716, Ridl. 2930, 11443, B. & H. 12711, 13209; flr. March, May, Dec., fruit Feb.-May, Sept. A shrub, endemic, 2c, 4e, 4f, 9k.

Urophyllum glabrum, *Wall.* 300-2500′, Wray 1825, 2079, 2592, 2940, Ridl., Anders. 151; flr. March, fruit Feb., March. A shrub of W. Malaysia and the Philippines; in Peninsula common.

Urophyllum Griffithianum, *Hook. fil.* Taiping Hills, Wray, fide Ridl. A large shrub or small tree of Sumatra and Java; in Peninsula common.

Urophyllum hirsutum, *Hook. fil.* 300-3000′, Kunstl. 3236, H. & N. 2496; flr. Feb., Aug. A shrub or small tree, endemic and common.

Urophyllum macrophyllum, *Korth.* At 700′, Hend. 10425; flr. Oct. A shrub or small tree of Tenasserim, Java and Borneo; in Peninsula 2d, 4d, 6e, 3f, 5g, 5h, 9m.

Urophyllum streptopodium, *Wall.* At 600′, Hend. 10481; flr. Feb. A shrub of Borneo; in Peninsula common.

Urophyllum villosum, *Wall.* 300-1000, Wray 2634, Kunstl. 2563, Ridl., Hend. 10032, 10091, 10181, 10476; flr. June, Nov., fruit Jan., Feb., Dec. A shrub, endemic, 2d, 4e, 3f, 4f, 6g, 8j, 9m.

Brachytome Scortechinii, *King and Gamble.* 3500-4500′, Wray 2999, Curt., H. & N. 2328, B. & H. 13014; flr. Feb., fruit March, Sept. A shrub, endemic, 2c, 4f, 5g.

Randia auriculata, *Schum.* 300-3200′, Kunstl. 2514, 6467, Curt. 2020, B. & H. 12782; flr. Sept., Nov., fruit March, Aug. A woody climber of W. Malaysia to the Philippines; in Peninsula 2d, 4e, 4f, 6j, 8l, 9m.

Randia Curtisii, *King and Gamble.* 100-300′, Kunstl. 3305, 6814; flr. Sept., fruit Nov. A spiny climber, endemic, 2d.

Randia densiflora, *Benth.* 300-1500′, Wray 1851, Kunstl. 2752, 3893, 4222; flr. Jan., Feb. A shrub or tree of Indo-Australia, China and Japan; in Peninsula common.

Randia impressinervia, *King and Gamble.* At 200′, Wray 2158; flr. June. A climber of Borneo; in Peninsula 4f.

Randia longiflora, *Lam.* 300-800′, Kunstl. 5231; flr. Dec. A thorny climber of Indo-Malaya and China; in Peninsula common, usually in tidal rivers.

Randia macrophylla, *Hook. fil.* At 3000′, Wray 3232. A shrub of Sumatra; in Peninsula common.

Randia oocarpa, *Ridl.* At Taiping, Scort., fide Ridl. A thorny bush, endemic, 1b, 2b, 8h.

Randia Scortechinii, *King and Gamble.* 500-1000′, Wray 3212, Kunstl. 3453; flr. Oct. A bushy tree of Borneo; in Peninsula 2d, 4f, 5h, 6j.

Randia stenopetala, *Ridl.* 1000-3000′, Curt. 1306, 3144; flr. Dec. A shrub, endemic, 4e, 4f.

Gardenia virescens, *Ridl.* 3800-4000′, Ridl., B. & H. 13182; flr. March. A creeping shrublet, endemic and local.

Petunga Roxburghii, *DC.* At 4000′, Anders. 83; flr. March. A bush or tree of Indo-Malaysia; in Peninsula, Kedah to Johore.

Petunga venulosa, *Hook. fil.* Taiping Hills, Wray, fide Ridl. A tree up to 60′ of Borneo; in Peninsula 2d, 3f, 4f, 6k.

Diplospora Kunstleri, *King and Gamble.* 2000-3700, Kunstl. 3211, B. & H. 12717, 12774; flr. March, Aug., fruit March. A small tree, endemic, 7k.

Diplospora malaccensis, *Hook. fil.* At 3700′, Anders., B. & H. 12977; fruit March. A small bushy tree of Sumatra and Borneo; in Peninsula common.

Diplospora Wrayi, *King and Gamble.* 2000-4000′, Wray, Kunstl. 5277, 6253, Curt. 1304, Ridl. 5544; flr. June, fruit Feb., Dec. A shrub, endemic, 4d, 5h.

Jackia ornata, *Wall.* At 100′, Kunstl. 5294, 8466; flr. Dec., fruit Feb. A small tree of Sumatra and Borneo; in Peninsula 3f, 4h, 6k, 9m.

Ixora arguta, *R. Br.* 200-2000′, Wray 2135, Curt. 1303, Ridl.; flr. Dec., fruit June. A bush of Burma to Lower Siam; in Peninsula common.

Ixora concinna, *Br.* At 4700′, B. & H. 12629; flr. March. A tree of St. Barbe Isle; in Peninsula Taiping to Singapore.

Ixora congesta, *Roxb.* 700-1000′, Hend. 10116, 10202, 10203; flr. Jan., June. A small shrub of Tenasserim; in Peninsula common.

Ixora grandifolia, *Zoll. and Mor.* 100-4500′, Kunstl. 5609, H. & N. 2455; flr. and fruit Feb. A shrub or tree of W. Malaysia; in Peninsula common.

Ixora Kingstoni, *Hook. fil.* At Changkat Serdang, Wray. A large bush, endemic, Taiping to Johore.

Ixora Lobbii, *Loud.* 1000-4400′, Wray 519 (var. angustifolia), Fox 158, Derry, Anders. 152, Ridl., B. & H. 12713; flr. March, June, Oct. A shrub or small tree of Siam; in Peninsula the species common, the var. at 6d, 5h.

Ixora pendula, *Jack,* var. opaca, *Ridl.* 100-3000′, Kunstl. 4061, 4118, Curt. 2022, Ridl., Anders. 155, Hend. 10119, B. & H. 12698; flr. Jan.-April, Sept., fruit March. A shrub, the species in Sumatra; in Peninsula the species and var. common.

Ixora stricta, *Roxb.* 2100-4500′, Kunstl. 2247, Anders. 31; flr. March, Aug., fruit Aug. A shrub of Indo-Malaya and China; in Peninsula common.

Pavetta graciliflora, *Wall.* Taiping Hill, Anders. 154; flr. March. A shrub of Lower Siam; in Peninsula common from Malacca northwards.

Pavetta indica, *Linn.*, var. canescens, *Ridl.* 4000-4700′, Ridl., Anders. 153, B. & H. 12591, 12666, 12857; flr. Feb., March, fruit March. A large bush, the species in Indo-Australia and S. China; in Peninsula the var. common, the species at 2b.

Tarenna grandifolia, *Ridl.* At Maxwell's Hill, Derry. A small shrub, endemic and common.

Tarenna longifolia, *Ridl.* 100-2500′, Ridl. 2920, 14315; flr. Aug. A small shrub, endemic, 1a, 1b, 2d, 6j, 6k, 8k.

Tarenna Ridleyi, *Pearson.* Taiping Hill, Anders. 105; flr. March. A small shrub, endemic, 4f, 8g, 6k, 7l, 9m.

Tarenna Wallichii, *Ridl.* 100-500′, Kunstl. 2516, 2794; flr. Feb., Nov. A shrub of Borneo; in Peninsula 2b, 2d, 8g, 6k.

Stylocoryna costata, *Miq.* At 3200′, B. & H. 12786; fruit March. A tree of Sumatra; in Peninsula 5h, 6j, 6k.

Gardeniopsis longifolia, *Miq.* 2500-3500′, Wray 2832, Kunstl. 2361, 2850, Ridl. 5343; flr. June, Sept., fruit March. A shrub of Sumatra; in Peninsula common.

Timonius Wallichianus, *Valeton.* 300-1000′, Kunstl. 5464, 6300; fruit Jan. A small tree, endemic and common on the West.

Timonius Wrayi, *King and Gamble.* 500-1500′, Wray 3200, Kunstl. 5168, 5781, 6781; flr. Oct., fruit Nov. A tree up to 50′, endemic, 2d, 3f, 9k, 9m.

Prismatomeris malayana, *Ridl.* 2500-3000′, Wray 2948, Kunstl. 6344; flr. July, fruit Aug. A shrub or small tree of Indo-China and W. Malaysia; in Peninsula common.

Morinda elliptica, *Ridl.* At 4000′, Curt. 2016; flr. Sept. A small tree, endemic, very common. Hitherto confused with M. citrifolia, (Ridley).

Rennellia paniculata, *King and Gamble.* 3000-3500′, Kunstl. 5432, Anders. 118, H. & N. 2354; flr. Jan., fruit Jan.-March. A shrub or small tree, endemic, 2d, 6d, 4f, 5h.

Rennellia speciosa, *Hook. fil.*, var. elongata, *King and Gamble.* 1000-1500′, Kunstl. 3926, Curt.; flr. & fruit Feb. & Dec. A shrub, the species in Indo-Malaya; in Peninsula common.

Coelospermum scandens, *Bl.* 800-1000′, Kunstl. 7248; fruit Feb. A slender climber of Malaysia; in Peninsula 6k, 9m.

Coelospermum truncatum, *King and Gamble.* At 100′, Kunstl. 5508; fruit Feb. A shrubby climber of Tenasserim, Sumatra and Java; in Peninsula 2d, 6k, 9m.

Canthium horridum, *Bl.* 300-500′, Kunstl. 6234; flr. June. A spiny shrub of Indo-Malaya and the Philippines; in Peninsula common.

Psychotria angulata, *Korth.* Taiping Hill, Anders. 106; flr. March. A shrub of Burma, Bangka and Borneo; in Peninsula common.

Psychotria Birchiana, *King and Gamble.* 300-4700′, all collectors; flr. Feb., March, May, Aug., fruit Feb., March, Oct. A small shrub of Lower Siam; in Peninsula 4e, 6f, 5g, 5h.

Psychotria calocarpa, *Kurz.* At Maxwell's Hill, Ridl.; fruit Feb. A small shrub of India and Burma; in Peninsula 6d, 3f, 5h, 0j, 6k, 7k, 71.

Psychotria montana, *Bl.* At Maxwell's Hill, Ridl. 2922; fruit March. A shrub of Burma, Sumatra and Java; in Peninsula 4d, 6d, 6e, 5g, 5h, 0j, 7k.

Psychotria morindaeflora, *Wall.* At Maxwell's Hill, Curt. 2019; flr. Sept. A woody climber, endemic, 2d.

Psychotria ovoidea, *Wall.* 2000-3000′, Ridl. 5545, B. & H. 13220; fruit March, June. A slender climber, endemic, 8g, 7j, 6k, 9k, 9l, 9m.

Psychotria penangensis, *Hook. fil.* Taiping Hills, Ridl.; flr. Dec., fruit March. A climber, endemic, common.

Psychotria rhinocerotis, *Reinw.* At Waterloo, 1500′, Curt. 2695; fruit May. A small shrub of Java; in Peninsula 1b, 2b.

Psychotria rostrata, *Bl.* 300-500′, Scort. 1482, Kunstl. 2190; flr. Aug. A shrub of W. Malaysia; in Peninsula common.

Psychotria sarmentosa, *Bl.* Taiping Hills, Ridl. 11442; flr. Dec. A climber of Indo-Malaya; in Peninsula common.

Psychotria Scortechinii, *King and Gamble.* 3000-4200′, Fox 161, Ridl., H. & N. 2745; flr. Feb., Oct., fruit Feb. A climber, endemic and local.

Psychotria stipulacea, *Wall.* At Maxwell's Hill, Ridl. 2918, Anders. 101; flr. March. A shrub of Sumatra; in Peninsula common.

Psychotria viridiflora, *Reinw.* At 3900′, Ridl. 2919, B. & H. 12950; flr. and fruit March. A large bush or small tree of Indo-Malaya; in Peninsula common.

Chasalia curviflora, *Thw.* 500-3800′, Ridl. (var. longiflora), Hend. 10011, 10026, B. & H.; flr. Jan., Feb., March. A shrub of Indo--Malaya and the Philippines; in Peninsula common.

Cephaelis cuneata, *Hook. fil.* At 2000′, Ridl.; fruit Dec. A small shrub, endemic, common.

Cephaelis Ridleyi, *King.* 300-2500′, Curt., Ridl. 11440; flr. June, fruit May, Oct., Dec. A shrub, endemic, 5g.

Lasianthus appressus, *Hook. fil.* 600-3000′, Ridl., Hend. 10103, B. & H. 12699; fruit Jan.-March. A shrub of Borneo; in Peninsula common.

Lasianthus attenuatus, *Jack.* Taiping Hills, Ridl.; fruit Dec. A shrub of Lingga; in Peninsula, Taiping to Singapore.

Lasianthus constrictus, *Wight.* 300-500′, Kunstl. 2780; fruit Feb. A shrub of Burma, Java, and Borneo; in Peninsula common.

Lasianthus cyanocarpus, *Jack.* At 2500′, Wray 2819. A shrub of Indo-Malaya to the Philippines; in Peninsula common.

Lasianthus ?glaberrimus, *Ridl.* At 3800′, B. & H. 12645; fruit March. (Determination doubtful). A foetid shrub, endemic, 2d, 5g, 6k.

Lasianthus gracilis, *King and Gamble.* At 2000′, Ridl. 2904; fruit March. A bushy shrub of Java; in Peninsula 4f.

Lasianthus Griffithii, *Wight.* At 2000′, Ridl.; fruit Feb. A shrub of Lingga and Borneo; in Peninsula from Taiping to Singapore.

Lasianthus inaequalis, *Bl.* At 800′, Wray 2588; flr. July. A shrub of W. Malaysia and the Philippines; in Peninsula 2d.

Lasianthus Lowianus, *King and Gamble.* 2000-3000′, Kunstl. 2797, Ridl.; flr. Feb., fruit Dec. A foetid shrub, endemic, 2b, 4f, 5g, 5h.

Lasianthus Maingayi, *Hook. fil.* At Taiping, Ridl. 14338; fruit Aug. A shrub of Sumatra and Borneo; in Peninsula common.

Lasianthus montanus, *King and Gamble.* 3000-3500′, Kunstl., fide Ridl. A bushy shrub, endemic, 6e.

Lasianthus oblongus, *King and Gamble.* 500-4000′, Wray 2590, Kunstl. 4128, Curt. 2018, Ridl. 11438, Hend. 10200; flr. April, June, July, Sept., fruit June, Dec. A foetid shrub, endemic, common.

Lasianthus pilosus, *Wight.* At Waterloo, Curt.; flr. May. A shrub of ?Burma; in Peninsula 6d, 6f, 7f, 6k, 8k.

Lasianthus rhinocerotis, *Bl.* 4000-4700′, Anders. 64, B. & H. 12660, 12878; flr. Feb., March. A shrub or small tree of Java and Borneo; in Peninsula 4e, 4f, 5g, 6g, 5h, 8l.

Lasianthus stipularis, *Bl.* At Taiping, Scort. 213; fruit March. A slender shrub of Malaysia; in Peninsula 4d, 6d, 6g, 5h, 9l, 9m.

Saprosma Scortechinii, *King and Gamble.* 2500-3000′, Kunstl., fide Ridl. A shrub, endemic, 6d, 4f.

Saprosma ternatum, *Hook. fil.* 300-500′, Wray 2262, Kunstl. 4006, Curt. 2088; flr. March, Sept. A shrub of Indo-Malaya; in Peninsula 6d, 6e, 7f, 6g, 5h, 6k, 7k.

Amaracarpus caudatus, *Ridl.* At about 4000′, Wray, fide Ridl. A small foetid tree, endemic and local.

Paederia foetida, *Linn.* At 100′, Kunstl. 7650; flr. May. A climber of Indo-Malaya and China; in Peninsula 1b, 2b, 2d, 6e, 4f, 8h, 6k, 8k, 9m.

Paederia verticillata, *Bl.* 100-500′, Kunstl. 5316, Hend. 10145; flr. Feb., Dec. A climbing shrub of W. Malaysia to the Philippines; in Peninsula common.

Borreria hispida, *Schum.* At Taiping, Hend. 10234; flr. Nov. A rough wiry herb of Indo-Malaya and China; in Peninsula common.

Spermacoce ocymoides, *Burm.* At Maxwell's Hill, B. & H. A pantropic weed, common in the Peninsula.

Cinchona succi-rubra, *Pav.* At 3600′, B. & H. 12644; flr. and fruit March. Cultivated. A native of S. America.

COMPOSITAE.

Elephantopus scaber, *Linn.* At Taiping, Hend. 10247; fruit Jan. A rough herb, pantropic; in Peninsula common.

Mikania scandens, *Willd.* Roadsides, Taiping, Hend. 10018; flr. Jan. A shrub or climber, pantropic; in Peninsula common.

Ageratum conyzoides, *Linn.* 2000-3800′, Hend. 10132, B. & H. 12553; flr. Jan., March. A herb, pantropic; in Peninsula very common.

Bidens pilosa, *Linn.* Maxwell's Hill clearing, B. & H. A pantropic herb; in Peninsula common.

Synedrella nodiflora, *Gaertn.* At 300′, Hend. 10308; flr. Aug. A herb, pantropic; in Peninsula common.

Vernonia cinerea, *Less.* 200-4000′, Hend. 10000, B. & H.; flr. and fruit all the year. A pantropic herb; in Peninsula very common.

Emilia sonchifolia, *King and Gamble.* 200-4750′, Hend. 10213, B. & H.; flr. Sept. A herb, pantropic; in Peninsula common.

Erechthites valerianifolia, *DC.* At 4750′, B. & H. 12889; flr. and fruit Feb. A herb, pantropic; in Peninsula common.

Blumea balsamifera, *DC.* At 200′, Hend. 10146; flr. Feb. Ngai camphor. A shrub of Indo-Malaya; in Peninsula common.

Blumea chinensis, *DC.* At about 3700′, Ridl., B. & H. 12775; fruit Feb., March. A climber of Indo-Malaya; in Peninsula common.

Blumea densiflora, *DC.* 3700-4000′, Hervey, Ridl., B. & H. 12777; flr. Feb., March. A shrub of Himalaya, Burma and Java; in Peninsula 3e only? Apparently rare.

Blumea lacera, *DC.* At Taiping, Hend. 10163; fruit April. A herb of Trop. Africa and Asia; in Peninsula common.

Blumea membranacea, *DC.* Larut Hills, Ridl. A herb of Indo-Malaya; in Peninsula common, especially in the North.

Dicrocephala latifolia, *DC.* At Taiping, Ridl. (not seen). A herb of Trop. Africa and Asia; in Peninsula 3e only.

Crepis japonica, *Benth.* At 3700′, B. & H. 12648; fruit March. A herb of the Tropics of the Old World; in Peninsula 2b, 2d, 4e, 6k, 7l, 8l.

Galinsoga parviflora, *Cav.* 100-3700′, Ridl. 11938, B. & H. 12911; flr. Feb. A herb, introduced from Trop. America. Also in Java.

Tithonia diversifolia, *Gray.* Running wild on edge of Maxwell's Hill clearing, B. & H. An American herb.

LOBELIACEAE.

Lobelia affinis, *Wall.* 300-4000′, Kunstl. 2376, Curt. 2025, Anders. 85; flr. Sept., fruit March, Sept. A creeping herb of Indo-Malaya and China; in Peninsula common.

Isotoma longiflora, *Presl.* 200-2000′, Hend. 10121, 10378; flr. and fruit Jan. A herb of the W. Indies; in Peninsula an escape from cultivation.

CAMPANULACEAE.

Campanumaea celebica, *Bl.* At 4000′, Curt. 2089; fruit Sept. A herb of Indo-Malaya; in Peninsula 5g.

Pentaphragma Scortechinii, *King and Gamble.* 2000-4000′, Kunstl. 2653, Ridl. 2896, Hend. 10128; flr. Jan. An erect herb, endemic, common.

VACCINIACEAE.

Agapetes perakensis, *Ridl.* 3000-4000′, Kunstl. 6363, Fox 165, Ridl. 5532. H. & N. 2479, B. & H. 12682; flr. Feb., June, fruit March, July. An epiphytic climber, endemic, 4f, 5g.

Vaccinium acuminatissimum, *Miq.* 300-1500′, Kunstl., fide Ridl. A small epiphytic shrub of W. Malaysia; in Peninsula 4f, 9m.

Vaccinium bancanum, *King.* 3500-4750′, Kunstl. 7018, 8415, Anders. 49, B. & H. 12573, 12620; flr. Jan., March, fruit March, Dec. A shrub of W. Malaysia; in Peninsula 6e, 5g, 5h, 7k.

Vaccinium Hasseltii, *Miq.* At 3500′, H. & N. 2360; flr. Feb. A large epiphytic shrub of Sumatra and Java; in Peninsula 2c, 6g, 5h, 8h, 9m.

Vaccinium perakense, *Ridl.* 3000-4000′, Curt. 3703, Ridl.; flr. March. A shrub or small tree, endemic, 6e, 6g, 9k.

ERICACEAE.

Diplycosia microphylla, *Becc.* 4500-4750′, Curt., B. & H.; flr. Sept. An epiphytic shrub of Borneo; in Peninsula, Kedah Peak to Mt. Ophir.

Rhododendron jasminiflorum, *Hook.*, var. maculata. 4000-4200′, Curt., Fox 124, Derry, B. & H. 12621; flr. Oct., fruit March, Oct. An epiphytic shrub of W. Malaysia; in Peninsula the species at 2c, 7k, 9k, the var. at 6e, 4f, 5g, 9k.

Rhododendron javanicum, *Benn.* 2500-4570′, all collectors; flr. March, Sept., Oct., Dec., fruit March, Dec. An epiphytic shrub of W. Malaysia except Borneo; in Peninsula 2c, 2d, 5g, 5h.

Rhododendron longiflorum, *Lindl.* 500-2500′, Kunstl. 5181, B. & H. 13205; flr. March, Nov. An epiphytic or terrestrial shrub of Sumatra and Borneo; in Peninsula 2c, 6e, 4f, 5h, 6j, 9m.

Rhododendron malayanum, *Jack.* 4000-4750′, Wray 614, Curt. 2029, Ridl., H. & N. 2319, Anders. 39, Derry, B. & H.; flr. Feb., March, Sept., Oct. A small epiphyte of W. Malaysia; in Peninsula 4e, 6e, 4f, 5g, 5h, 7k.

MYRSINACEAE.

Maesa indica, *Wall.* 2000-3000′, Scort. 365, Ridl. 3007; flr. April. A shrub or small tree of Indo-Malaya; in Peninsula 5g.

Maesa macrothyrsa, *Miq.* At Taiping, Hend. 10243; flr. Nov. A climber of Sumatra and Borneo; in Peninsula 3e only.

Maesa ramentacea, *Wall.* 200-300′, Kunstl. 2788, 4144; flr. Feb., fruit April. A climber or tree of Indo-Malaya; in Peninsula common.

Myrsine Porteriana, *Wall.* At about 4000′, Ridl. 2992, B. & H. 12760; flr. March, fruit Feb. A shrub or small tree of Sumatra; in Peninsula 2d, 8g, 5h, 7k, 9k, 9l.

Embelia amentacea, *Clarke.* 800-1000′, Kunstl. 6280; flr. and fruit July. A slender climber of Borneo; in Peninsula 3f, 5g, 5h, 6k, 9m.

Embelia coriacea, *Wall.* 100-4700′, all collectors; flr. Oct., Nov., fruit Feb., Aug., Sept., Nov. A liane of W. Malaysia and the Philippines; in Peninsula common.

Embelia dasythyrsa, *Miq.* At 300′, Kunstl. 4103: fruit April. A slender climber of Bangka and Borneo; in Peninsula 4f, 5h, 6k.

Embelia Lampani, *Scheff.* 500--1000′, Kunstl. 4210; flr. May. A slender climber of Sumatra; in Peninsula 2d, 5h, 6k, 9m.

Embelia parviflora, *Wall.* 3800-4000′, B. & H. 12939; fruit March. A slender climber of Burma and Sumatra; in Peninsula 3e only.

Labisia pothoina, *Lindl.* 2500-4700′, Wray 753, B. & H.; flr. and fruit March. A herbaceous undershrub of W. Malaysia; in Peninsula common.

Ardisia andamanica, *Kurz.* At Maxwell's Hill, Wray 108. A tall shrub of Tenasserim; in Peninsula 4f, 5g, 5h, 7k, 8l.

Ardisia colorata, *Roxb.* 100-3800′, Scort. 1505, Kunstl. 3284, 3567, Curt., Anders. 149, H. & N. 2332, B. & H. 12683, 13191: flr .Feb., March, Nov., fruit March, May, Aug. A shrub or small tree of Indo-Malaya; in Peninsula common.

var. polyneura, *Clarke.* 2000-2500′, Wray 2810, Ridl. 3000, 5508; fruit Feb., June, Aug. Distrib: Lower Siam; in Peninsula 4f, 5h, 6k, 9m.

var. salicifolia, *King and Gamble.* 1800-3000′, Wray 2960, Kunstl. 3216, 6816, Ridl.; flr. Aug., Nov., fruit Aug., Dec. Distrib: Lower Siam; in Peninsula 2d, 5g, 6k.

Ardisia crenata, *Roxb.* At 2000′, Ridl. 2899. A bush of Indo-Malaya, China and Japan; in Peninsula common.

Ardisia Kunstleri, *King and Gamble.* 300-800′, Kunstl. 4071, 4100; flr. March, fruit April. A shrub up to 20′, endemic, 4f.

Ardisia lanceolata, *Roxb.* 300-2000′, Kunstl. 2954, Curt.; flr. April, May. A tree about 40′, of W. Malaysia and the Philippines; in Peninsula common.

Ardisia oxyphylla, *Wall.* At 2000′, Curt.; flr. May. A shrub of Tenasserim, Lower Siam and Borneo; in Peninsula 1a, 2d, 4d, 3f, 6j, 6k.

Ardisia porosa, *Clarke.* 200-4500′, Wray 2160, 2835, Scort. 116a, Ridl. 14262, Hend. 10454; flr. Feb., June, Aug., Dec. A shrub, endemic, 2d, 6j, 6k.

Ardisia Ridleyi, *King and Gamble.* 2500-4000′, Ridl. (not seen). A shrub of Sumatra; in Peninsula 1b, 6e, 5g, 7k, 9l, 9m.

Ardisia rosea, *King and Gamble.* 2500-4300′, Kunstl. 6247, Ridl. 5511, Anders. 71, B. & H. 12598, 13027; flr. and fruit March and June. A shrub or small tree, endemic, 6e, 4f, 5g.

Ardisia solanacea, *Roxb.* At about 2500′, Wray 3000; flr. Sept. A shrub or tree of India and Burma; in Peninsula 4f, 5h.

Ardisia villosa, *Roxb.* 500-2000′, Wray 2801 (var. glabrata), 3149, Kunstl. 6448, Ridl.; flr. Aug., fruit Aug., Sept. A small shrub of Indo-Malaya; in Peninsula common.

Ardisia virens, *Kurz.* 3800-4000′, Ridl., B. & H. 12969; flr. and fruit March. A big shrub of Indo-China and Borneo; in Peninsula 4f.

Ardisia Wrayi, *King and Gamble.* At 300′, Wray 3280; fruit Oct. A small shrub, endemic and local.

Antistrophe caudata, *King and Gamble.* At 2000′, Ridl.; fruit Feb. A shrub or small tree, endemic, 4f, 5h, 6j.

Antistrophe Curtisii, *King and Gamble.* At 4000′, Curt. 3390; flr. June. A shrub, endemic, 4e.

SAPOTACEAE.

Sideroxylon malaccense, *Clarke.* 300-1000′, Wray 136, Kunstl. 6550; flr. Sept. A tree up to 60′, endemic, 2d, 5h, 6k, 9m.

Payena dasyphylla, *Pierre.* At 3500′, Kunstl., fide Ridl. A tree up to 100′, of Sumatra and Java; in Peninsula 3e only, except a var. in Perak and Singapore.

Payena Leerii, *Kurz.* At Taiping, Barnard, C.F.946. A tree up to 100′, of W. Malaysia and the Philippines; in Peninsula 4f.

Bassia Braceana, *King and Gamble.* 100-500′, Kunstl. 3195, 3740, 6447; flr. Aug., fruit Jan. A tree up to 70′, endemic, 2d, 4f.

Bassia Curtisii, *King and Gamble.* Waterfall Hill, Wray 512. A tree up to 80′, endemic 2d.

Bassia Kunstleri, *King and Gamble.* 500-2000′, Wray 2463, Kunstl. 6410, Ridl. 5536, Derry; flr. Aug., fruit June, Oct. A tree up to 60′, endemic and local.

Bassia laurifolia, *King and Gamble.* At 300′, Kunstl. 3720; fruit Jan. A tree up to 60′, endemic, 2c, 2d, 3d, 5h.

Bassia longistyla, *King and Gamble.* At 300′, Kunstl. 2680; flr. Jan. A tree up to 100′, endemic and local.

Bassia Motleyana, *Clarke.* 100-1000′, Wray, Kunstl. 5454 (var. Scortechinii); flr. Jan. A tree about 80′, of Borneo; in Peninsula 5j, 6k, 9l, 9m.

Bassia perakensis, *King and Gamble.* At 2000′, Derry (Curt. 3695); fruit Sept. A tree up to 80′, endemic and local.

Palaquium bancanum, *Burck.* 300-500′, Kunstl. 6506; flr. Aug. A tree up to 150′, endemic, 2d, 9m.

Palaquium Clarkeanum, *King and Gamble.* At 600′, Wray 530. A tree up to 100′, endemic, 1b, 5h, 6k.

Palaquium Gutta, *Burck.* 100-2800′, Curt. 3637, 3725, Stephens, B. & H.; fruit Aug. The Gutta Percha tree. A tree up to 100′, of W. Malaysia; in Peninsula common.

Palaquium Maingayi, *King and Gamble.* At Changkat Serdang, Wray. A tree up to 60′, endemic, 5h, 6j, 6k.

Palaquium Oxleyanum, *Pierre.* 300-3000′, Wray 518 (var. glabrata), 590, Curt. 3638, 3724, Derry. A lofty tree, the var. only in Lower Siam; in Peninsula 6f, 5h, 9m.

Palaquium xanthochymum, *Pierre.* Larut, Kunstl., fide Ridl. A tree up to 120′, of Bangka and Borneo; in Peninsula 6k, 9m.

EBENACEAE.

Diospyros apiculata, *Hiern.* 500-800′, Kunstl. 5127, 6770; flr. Oct., Nov. A shrub, endemic, 2d.

Diospyros argentea, *Griff.* 3000-4000′, Kunstl. 6896, Ridl.; flr. Nov. A shrub, endemic, 6e, 3f, 4f, 5h, 6k, 9m.

Diospyros bilocularis, *Oliv.* 1500-2000′, Kunstl. 7383; fruit March. A tree about 80′, endemic, 6k, 9m.

Diospyros ellipsoidea, *King and Gamble.* 500-1000′, Kunstl. 7269; flr. and fruit Feb. A shrub or tree, endemic, 4f.

Diospyros flavicans, *Hiern.* 300-1500′, Kunstl. 3072, 3380, 3774, 6633; flr. Sept., fruit Jan., June. A shrub or tree, endemic, 1a, 2d, 4f, 5g, 6k.

Diospyros graciliflora, *Hiern.* 300-2500′, Wray 3214, Kunstl. 5173, 6742; flr. Oct., fruit Sept. A tree up to 50′, of Java and Borneo; in Peninsula 2c, 2d, 4f.

Diospyros nutans, *King and Gamble.* Larut Hills, Kunstl., fide Ridl. A shrub up to 15′, endemic, 4f, 9l.

Diospyros oblonga, *Wall.* 1000-2000′, Kunstl. 4924; fruit Oct. A tree up to 70′, endemic, 2d, 3f, 6k, 9m.

Diospyros rigida, *Hiern.* 100-2500′, Wray, Kunstl. 4204; fruit March. A tree up to 40′, endemic, 4d, 4f.

Diospyros rufa, *King and Gamble.* 300-3500′, Kunstl. 3330, 5409, 6712; fruit Jan., Sept., Oct. A tree up to 80′, endemic, 6k.

Diospyros Scortechinii, *King and Gamble.* 2000-4000′, Wray 638, Kunstl. 4126, 5296, 6356, Curt. 2092, Ridl.; flr. April, July, fruit Sept., Dec. A tree up to 50′, endemic, 2d, 4f, 5g, 5h.

Diospyros subrhomboidea, *King and Gamble.* 1000-1500′, Kunstl., fide Ridl. A shrub, endemic, 5g, 5h.

Diospyros toposioides, *King and Gamble.* 1000-1500′, Kunstl. 4106; fruit April. A tree up to 40′, endemic, 3f, 4f, 5h.

Diospyros tristis, *King and Gamble.* Larut, Kunstl., fide Ridl. A tree up to 50′, endemic and local.

Diospyros Wallichii, *King and Gamble.* 200-500′, Wray 2535, Kunstl. 2966, 6779; flr. April, Oct., fruit July. A tree up to 60′, of Lower Siam; in Peninsula 1b, 2d, 4f, 5h, 6k.

STYRACACEAE.

Styrax benzoin, *Dryand.* At 2500′, B. & H. 12828; fruit March. A tree up to 80′, of Sumatra and Java; in Peninsula 4f, 5h, 6j, 6k, 9m.

Symplocos adenophylla, *Wall.* 3500-4000′, Kunstl. 6873; flr. Nov. A shrub or small tree of Sumatra, Borneo and Philippines; in Peninsula 2c, 2d, 6e, 5g, 6k, 9k, 9m.

Symplocos Brandiana, *King and Gamble.* 3000-4000′, Scort. 346, Curt. 2030; flr. March, Sept. A small tree, endemic and local.

Symplocos calycodactylos, *Brand.* At Waterloo, 3000′, Curt. 1330; flr. Dec. A shrub?, endemic and local.

Symplocos cerasifolia, *Wall.* 2500-3500′, Wray 3003, H. & N. 2326; fruit Feb., Sept. A tree up to 80′, endemic, 2d, 6k.

Symplocos Curtisii, *Oliv.* 1800-4500′, Wray 692, 2830, Kunstl. 2099, 2804, Curt., Ridl. 5524, H. & N. 2453; flr. Feb., May, July, fruit June-Aug. A shrub or small tree, endemic, 2d, 4f.

Symplocos fasciculata, *Zoll.* 100-800′, Wray 1865, Scort. 1527, Kunstl. 2021, 5337; flr. May, July, Nov., Dec. A tree up to 50′, of W. Malaysia; in Peninsula 4e, 5h, 6j, 6k, 9m.

Symplocos ferruginea, *Roxb.* Larut Hills, Kunstl., fide Ridl. A tree up to 60′, of Indo-Malaya; in Peninsula 2d, 4f, 5g, 8h, 6k.

Symplocos perakensis, *King and Gamble.* At about 2500′, Wray 2944, 2953; flr. July, Aug. A tree up to 60′, endemic, 4f, 7g, 5h.

Symplocos rigida, *Clarke.* 500-3000′, Wray 3207, Kunstl. 5045, Curt. 3726, H. & N. 2386; flr. Oct., fruit Feb., Sept., Oct., Dec. A tree up to 80′, endemic, 4f, 5g, 6k, 9m.

Symplocos spicata, *Roxb.* 2500-4400′, Wray 2798 Kunstl. 6299, B. & H. 12951; flr. July, fruit March, Aug. A tree up to 20′, of Indo-Malaya and China; in Peninsula 5h, 8h, 6k.

Cordyloblaste Maingayi, *Ridl.* 300-800′, Kunstl., fide Ridl. A tree up to 60′, endemic, 6k.

OLEACEAE.

Jasminum bifarium, *Wall.* At Taiping, Hend. 10216, 10281; flr. Jan., Nov. A sprawler of W. Malaysia and the Philippines; in Peninsula common.

Jasminum insigne, *Bl.* At Tupai, Wray 2840; flr. Aug. A liane of Sumatra; in Peninsula 6e, 4f.

Jasminum Maingayi, *Clarke.* 500-3000′, all collectors; flr. Feb., March, fruit Dec. A climber, endemic, 2b, 2d, 4f, 5h, 7l.

Jasminum Scortechinii, *King and Gamble.* 2000-4500′, all collectors; flr. Feb.-April, Sept.-Dec., fruit Feb. A climber, endemic, 2d, 5g.

Jasminum Wrayi, *King and Gamble.* 300-1000′, Wray 3147, Ridl.; flr. Sept. A slender climber, endemic, 5h.

Osmanthus Scortechinii, *King and Gamble.* 100-4500′, Wray, Kunstl., fide Ridl. A tree up to 50′, endemic, 5h.

Linociera paludosa, *King and Gamble.* At 100′, Kunstl. 6476; flr. Aug. A tree up to 80′, of Borneo and the Philippines; in Peninsula 3e only.

Myxopyrum nervosum, *Bl.* 100-300′, Wray 2534, 4179, Scort. 532; flr. June, fruit April, July. A liane of Sumatra and Java; in Peninsula 2d, 4f, 5g, 6g, 6k.

APOCYNACEAE.

Willughbeia coriacea, *Wall.* At 1000′, Wray, H. & N. 2396; fruit Feb. A large liane, endemic, 1b, 2d, 6k, 9k, 9m.

Willughbeia edulis, *Roxb.* At 2000′, H. & N. 2381; fruit Feb. A liane of Assam, Burma and Borneo; in Peninsula 3f.

Willughbeia firma, *Bl.* At Waterfall Hill, Wray. A large liane of W. Malaysia; in Peninsula common.

Chilocarpus atroviridis, *Bl.* 2500-3000′, Scort., Kunstl., fide Ridl. A slender climber of Tenasserim; in Peninsula 5b, 6k.

Chilocarpus costatus, *Miq.* At Changkat Serdang, Wray. A liane of Sumatra; in Peninsula 2d, 4e, 7g, 5h, 6k, 8l.

Chilocarpus enervis, *Hook. fil.* 300-500′, Kunstl. 3786, 7532; fruit Jan. April. A liane of Borneo; in Peninsula 4f, 6j, 6k, 9l.

Chilocarpus minutiflorus, *King & Gamble.* Larut, Kunstl., fide Ridl. A climber, sometimes epiphytic, endemic and local.

Leuconotis eugenifolius, *DC.* At Waterfall Hill, Wray, fide Ridl. A climber of Sumatra and Borneo; in Peninsula 2d, 4e, 5g.

Leuconotis Griffithii, *Hook. fil.* At Taiping, Wray. A climber, endemic, 5h, 6j, 6k, 9m.

Melodinus citriformis, *King and Gamble.* 500-800′, Kunstl., fide Ridl. A slender climber, endemic and local.

Melodinus coriaceus, *Olir.* At 300′, Wray, fide Ridl. A liane, endemic, 2d.

Melodinus orientalis, *Bl.* At 3000′, Scort. 355; flr. April. A liane of Sumatra and Java; in Peninsula 2d, 4f.

Alyxia Forbesii, *King and Gamble.* 3200-3800′, Kunstl. 2124, B. & H. 12978; flr. July, fruit March. A climber of Sumatra and Java; in Peninsula 2d, 4d, 5g, 6g.

Hunteria corymbosa, *Roxb.* At 300′, Kunstl. 7465; flr. April. A tree up to 40′, of India and Sumatra; in Peninsula 1b, 2d, 5h, 6j.

Rauwolfia perakensis, *King and Gamble.* 3600-4300′, Ridl. 2898, 5523, H. & N. 2338, B. & H. 12582, 12625; flr. Feb., March, fruit June. A shrub of Lower Siam; in Peninsula 2c, 4d, 6d, 8d, 4f, 6f, 5g, 5h, 8h.

Ervatamia corymbosa, *King and Gamble.* At 2900′, B. & H 12691; fruit March. A shrub or tree, endemic and common.

Ervatamia cylindrocarpa, *King and Gamble.* At 3200′, B. & H. 12684; fruit March. A shrub, endemic, from Penang to Malacca.

Ervatamia peduncularis, *King and Gamble.* 200-300′, Wray 1936, Kunstl. 1858, Hend. 10076; flr. June, fruit Jan., May. A shrub, endemic and common as far south as Mt. Ophir.

Dyera costulata, *Hook. fil.* Jelutong. Common on the lower slopes of the hill, B. & H. A tree up to 250′, of Sumatra; in Peninsula common.

Alstonia angustiloba, *Miq.* At 300′, Wray, Kunstl., fide Ridl. A tree up to 100′, of Java, Borneo and the Philippines; in Peninsula 2d, 5g, 9m.

Pottsia cantoniensis, *Hook. and Arn.* 500-800′, Kunstl. 2318; flr. Sept. A liane of Java; in Peninsula 2d, 3d, 4f, 6k.

Strophanthus dichotomus, *DC.* 300-500′, Kunstl. 3896; flr. Feb. A sprawler of Java; in Peninsula 4f, 6f, 6k, 8k, 9m.

Urceola brachysepala *Hook. fil.* At 3800′, B. & H. 12560; flr. March. A liane, endemic, 2d, 6k, 9m.

Urceola elastica, *Roxb.* 800-3500′, Wray 4273, Kunstl. 2241, 4239, 5061, 7567; flr. May, fruit Aug., Oct. A large liane of Sumatra; in Peninsula 2d, 4f, 6k.

Parameria polyneura, *Hook. fil.* 200-500′, Kunstl. 3337, 7491; flr. April, Sept. A liane of Burma, Sumatra and Borneo; in Peninsula 2d, 6k, 9m.

Ecdysanthera multiflora, *King and Gamble.* 2000-3000′, Kunstl., fide Ridl. A liane, endemic and local.

Chonemorpha penangensis, *Ridl.* At 500′, Kunstl. 3636; flr. Dec. A liane, endemic, 2d, 4d, 4f, 6g, 6k.

Anodendron Candolleanum, *Wight.* 100-500′, Kunstl. 5558, 6516; flr. Feb., Aug. A liane of Borneo; in Peninsula 2d, 4e, 6k.

Anodendron pauciflorum, *Hook. fil.* 100-800′, Kunstl. 5587, 5599; flr. Feb. A climber up to 15′, endemic, 2d.

Cleghornia gracilis, *King and Gamble.* At 4000′, Kunstl., Scort., fide Ridl. A slender climber, endemic and local.

Trachelospermum Curtisii, *King and Gamble.* Larut, Kunstl., fide Ridl. A climber, endemic, 2d.

Micrechites furcata, *Ridl.* 300-500′, Kunstl. 6564; flr. Sept. A liane, endemic, 4g.

Micrechites tubulosa, *Ridl.*, n.sp. At 3200′, B. & H. 12785; flr. March. A liane, endemic and local.

ASCLEPIADACEAE.

Phyllanthera perakensis, *King and Gamble.* About 200′, Kunstl., fide Ridl. A climber, endemic and local.

Streptocaulon Wallichii, *Wight.* At 2000′, Ridl.; flr. and fruit March. A woody climber, endemic, 1b, 2b, 2d, 6d, 3f.

Toxocarpus Scortechinii, *King and Gamble.* At 3600′, Derry (Curt. 3706). A twining shrub, endemic and local.

Goniostemma acuminatum, *Wight.* Taiping Hills, Wray, Kunstl., fide Ridl. A slender climber of Assam; in Peninsula 2d.

Genianthus Maingayi, *Hook. fil.* Larut, Kunstl., fide Ridl. A slender climber, endemic, 9m.

Genianthus Ridleyi, *King and Gamble.* At 3500′, Ridl. 2988, 11988; H. & N. 2366; flr. Feb. A climber, endemic and local.

Genianthus rufo-velutinus, *King and Gamble.* At 300′, Kunstl. 5611; flr. Feb. A liane, endemic and local.

Cyanchum corymbosum, *Wight.* 300-500′, Kunstl., fide Ridl. A slender twiner of Himalaya and Assam; in Peninsula 2d.

Cyanchum ovalifolium, *Wight.* At Taiping, Kunstl., fide Ridl. A slender climber of Java; in Peninsula common.

Pentasacme caudatum, *Wall.* 300-3000′, Curt., Ridl. 2885; flr. Dec. A herb of India and Burma; in Peninsula 4d, 4e, 6e, 4f, 5g, 5h.

Tylophora exilis, *Colebr.* Larut, Kunstl., fide Ridl. A slender twiner of Assam; in Peninsula 3f, 5h, 6k.

Tylophora longifolia, *Wight.* 3700-4000′, all collectors; flr. March, June, Oct., Sept., Dec. A twiner of India and Borneo; in Peninsula 3e only.

Tylophora Wallichii, *Hook. fil.* At 3000′, H. & N. 2306; flr. Feb. A slender twiner of Borneo; in Peninsula 2d, 6j, 6k, 9m.

Heterostemma piperifolium, *King and Gamble* At Taiping, Ridl. 14268; flr. Aug. A slender twiner, endemic, 4e, 4f, 5h.

Hoya citrina, *Ridl.* At Batu Kurau, Scort., fide Ridl. A long climber, on limestone, endemic, 4f, 5h.

Hoya coronaria, *Bl.* At 300′, Hend. 10315, 10319; flr. and fruit Aug. A long climber of Malaysia; in Peninsula 2d, 8d, 3f, 4f, 8g, 7l, 9m.

Hoya Curtisii, *King and Gamble.* Waterloo, at 2000′, Curt. 2894; flr. Oct. A creeping epiphyte, endemic and local.

Hoya lacunosa, *Bl.* Larut, Kunstl., fide Ridl. A creeping epiphyte of W. Malaysia; in Peninsula 6k, 9m.

Hoya Maingayi, *Hook. fil.* 3700-4500′, Ridl., Anders. 55, H. & N. 2452, B. & H. 12750, 12964; flr. Feb., March, fruit Feb. A climber, endemic, 6k.

Hoya multiflora, *Bl.* 2000-2600′, Ridl. 5520, Hend. 10124; flr. Jan., June. A small epiphytic shrub of Indo-Malaya; in Peninsula 2d, 4f, 6f, 5g, 5h, 0j, 7k, 8l.

Hoya plicata, *King and Gamble.* At 3000′, Scort., fide Ridl. A climber, endemic and local.

Hoya revoluta, *Wight.* Maxwell's Hill, Ridl.; flr. June. A slender climber, endemic, common.

Hoya Ridleyi, *King and Gamble.* At 2400′, Ridl. (not seen). A long climber of Lower Siam; in Peninsula common.

Dischidia albida, *Griff.* Taiping Hills, Scort., fide Ridl. A slender creeper, endemic, 6e, 4f, 5g, 6k, 7k, 8l, 9m.

Dischidia astephana, *Scort.* 3600-4750′, H. & N. 2341, B. & H.; fruit Feb. A slender creeper, endemic, 4e, 6e, 4f, 6g, 5h.

Dischidia benghalensis, *Colebr.* 3200-4750′, B. & H. 12655, 12796; flr. March. A sprawler of Java and Borneo; in Peninsula common.

Dischidia coccinea, *Griff.* 4000-4500′, Ridl. 2903, Fox; flr. Oct. A slender creeper of Borneo; in Peninsula 8g, 6k, 9m.

Dischidia cordifolia, *King and Gamble.* At 2000′, Ridl.; flr. Feb. A twining shrub, endemic, 6g.

Dischidia hirsuta, *Dene.* At 300′, Wray, fide Ridl. A slender creeper of Indo-Malaya; in Peninsula 2d, on the Southern coasts in 4h, 8h, 6k, 9k, 9m, inland in 5h, and in varieties in 4f, 7k, 8l.

Dischidia Rafflesiana, *Wall.* Larut, Kunstl., fide Ridl. A creeper of Malaysia to Australia; in Peninsula 1b, 2b, 2c, 8g, 7k, 9m.

Dischidia Scortechinii, *King and Gamble.* At 4200′, B. & H. 12617; flr. March. A slender creeper, endemic, 5g.

Dischidia tubuliflora, *King and Gamble.* Taiping Hills, Ridl.; fruit Dec. A wiry creeper, endemic, 4e, 4f.

Dischidia sp. At 4700′, B. & H. 12640; flr. March. A creeper with small pink flrs.

Physostelma Wallichii, *Wight.* Taiping Hill, Ridl.; flr. Feb. A wiry twiner of W. Malaysia; in Peninsula 6e, 3f, 4f, 9m.

LOGANIACEAE.

Buddleia asiatica, *Lour.* 300-500′, Kunstl. 4060; flr. March. A small shrub of Indo-Malaya and China; in Peninsula 2d, 4d.

Fagraea auriculata, *Jack.* 4000-4200′, Curt., Fox, H. & N. 2344, B. & H. 12643, 12861; flr. Oct., fruit Feb., March, Oct. An epiphyte then a tree up to 30′, of Indo-China and W. Malaysia to the Philippines; in Peninsula 3f, 5h, 8h, 6k, 7l, 9l, 9m.

Fagraea carnosa, *Jack.* At 300′, Wray 2317; flr. June. An epiphytic shrub of Burma and Sumatra; in Peninsula 3f.

Fagraea lanceolata, *King and Gamble, non Blume.* At about 2500′, Wray 3202; fruit Sept. An epiphytic climber, endemic, 5g. A doubtful species of which flowers have not been collected.

Fagraea oblonga, *King and Gamble.* 2000-4000′, Wray 2992, Ridl. 5558, B. & H. 12685, 12982; flr. March, fruit March, June, Sept. An epiphyte, endemic, 4f, 5g.

Fagraea obovata, *Wall.* 300-4400′, Wray 4181, Kunstl. 7578, B. & H. 12585; flr. April, fruit March, June. An epiphytic shrub of Indo-Malaya; in Peninsula common.

Fagraea pauciflora, *Ridl.* 200-500′, Wray 1960, Kunstl. 1926, 3242, H. & N. 2400, Hend. 10218; flr. Feb. May, June, fruit Aug., Nov. A shrub of Sumatra and Borneo; in Peninsula 6e, 8j, 9m.

Fagraea racemosa, *Jack.* 200-500′, Kunstl. 3188, Hend. 10046; fruit Jan., Aug. A bush or small tree of Borneo; in Peninsula common.

Fagraea vaginata, *King and Gamble.* 300-4000′, Kunstl. 3868, 4044, 4238, Hervey; flr. Feb., May, fruit March. A large shrub or small tree of Java; in Peninsula 4f, 5h, 6k.

Strychnos flavescens, *King and Gamble.* Larut, Kunstl., fide Ridl. A liane, endemic, 2d, 6k.

Strychnos penicillata, *A. W. Hill.* At about 300′, Scort. 1485, Ridl. 3006, Forest Dept. C. F. 1154; fruit Nov. A liane, endemic, 2d, 3d, 4e, 6j.

Strychnos pubescens, *Clarke.* At 300′, H. & N. 2401 (a large-leaved variety). A liane of Indo-China, Sumatra and Borneo; in Peninsula 4f, 6j, 6k, 9m.

Strychnos Scortechinii, *A. W. Hill.* Larut, Kunstl., fide Ridl. A liane, endemic, 4f, 5h, 6k.

Gaertnera oblanceolata, *King and Gamble.* 3000-4700′, Ridl., Anders. 19, B. & H. 12898, 12902; flr. Feb., March, fruit March. A shrub, endemic and local.

CONVOLVULACEAE.

Erycibe aenea, *Prain.* 300-2500′, Kunstl., fide Ridl. A liane, endemic and local.

Erycibe festiva, *Prain.* 500-800′, Kunstl. 6445; flr. Aug. A liane, endemic, 6k, 9m.

Erycibe glomerata, *Bl.* 800-3000′, Wray 2580 (var. longifolia), Curt. 1283, Ridl. 2989 (var. typica); flr. Feb., Dec. A shrub or small tree of Java and Borneo; in Peninsula 1b, 4f.

Erycibe Griffithii, *Clarke.* Larut, Kunstl., fide Ridl. A liane of Tenasserim, Sumatra, Moluccas, and Philippines; in Peninsula 2d, 6k, 9m.

Erycibe magnifica, *Prain.* 500-1000′, Kunstl. 3454; flr. Oct. A liane, endemic and local.

Erycibe malaccensis, *Clarke.* 300-800′, Kunstl. 3180, 3575; flr. Aug., Nov. A climber, endemic, 2d, 6k.

Erycibe praecipua, *Prain.* Larut, Kunstl., fide Ridl. A liane, endemic, 2d.

Erycibe Stapfiana, *Prain.* 300-4000′, Kunstl. 4015, 4115; flr. March, April. A liane of Tenasserim; in Peninsula 4d, 4f, 5g.

Erycibe strigosa, *Prain.* 500-800′, Kunstl. 8461; flr. Feb. A liane, endemic and local.

Lettsomia Curtisii, *Prain.* At about 4500′, Anders. 63; fruit March. A climber, endemic, 5h.

Lettsomia Kunstleri, *Prain.* At Waterloo Estate, Ridl.; fruit March. A climber of Sumatra; in Peninsula 3d, 4f, 6f, 5g, 5h, 6j, 6k.

Lettsomia penangiana, *Miq.* 100-4000′, Wray 2334, Kunstl. 2048, 2574, Curt. 2034, Anders. 90, Derry; flr. March, June, July, Sept., fruit Nov. A slender climber, endemic, 2d, 5g.

Lettsomia Scortechinii, *Prain.* 3800-4400′, Fox 180, Ridl. 5559, Hervey, B. & H. 12943; flr. Feb., fruit March Oct. A slender climber, endemic and local.

Hewittia bicolor, *Wight.* Larut, Scort., fide Ridl. A twiner of Trop. Africa and Indo-Australia; in Peninsula 6k.

Merremia caespitosa, *Hallier.* Larut, Kunstl., fide Ridl. A slender twiner of Indo-Australia; in Peninsula common.

Merremia convolulacea, *Dennst.* At Larut, Ridl. (not seen). A slender twiner of Trop. Africa and Indo-Australia; in Peninsula a common weed.

Merremia hastata, *Hallier.* 100-500′, Hend. 10050, 10083, 10233; flr. Jan., Nov. A sprawler of Trop. Africa and Indo-Australia; in Peninsula common.

Merremia umbellata, *Hallier.* At Taiping, Ridl.; flr. Feb. A long twiner, pantropic; in Peninsula common.

Merremia vitifolia, *Hallier.* Larut, Scort., fide Ridl. A sprawler of S. E. Asia; in Peninsula 2b, 6c, 6d, 8g.

Ipomoea rubro-coerulea, *Hook.* At 3500′, B. & H. A twining herb of Mexico; running wild here.

Ipomoea staphylina, *R. & S.* var. malayana, *Prain.* 100-500′, Kunstl. 2538, 5091; flr. Oct., Nov. A shrubby climber of Sumatra; in Peninsula 2b, 2d, 6e.

SOLANACEAE.

Solanum aculeatissimum, *Jacq.* At 3300′, B. & H. 13002; fruit March. ? Cultivated. A prickly shrublet of Lower Siam to Java; in Peninsula usually on seashores and sandy places.

Solanum Blumei, *Nees.* 1800-4400′, Kunstl. 2234, Curt. 2035, Fox 126, Ridl.; flr. Aug.-Oct., fruit Sept. A shrub of W. Malaysia; in Peninsula 4e, 4f, 5g, 5h, 9l.

Solanum verbascifolium, *Linn.* 500-3500′, Kunstl. 2069, B. & H.; flr. July. A shrub up to 8′, pantropic; in Peninsula 2c, 2d, 6d, 5g, 7g, 5h, 9m.

Datura suaveolens, *Humb. and Bonpl.* At 3800′, B. & H. A Mexican herb; running wild here.

SCROPHULARIACEAE.

Wightia borneensis, *Hook. fil.* 2000-3000′, Derry; flr. Oct. A liane, eventually a tree, of Java and Borneo; in Peninsula 3e only.

Limnophila villosa, *Bl.* At Taiping, Wray, fide Ridl. A small aromatic herb of Sumatra and Java; in Peninsula common in damp places.

Vandellia crustacea, *Benth.* 100-500′, Hend. 10322, B. & H.; flr. and fruit Feb., Aug. A cosmopolitan weed; in Peninsula common.

Torenia atropurpurea, *Ridl.* 4000-4750′, Ridl. 5507, B. & H. 12735; flr. March, June. A creeping herb, endemic, 4f, 5g.

Bonnaya veronicaefolia, *Spreng.* var. grandifolia, *Hook. fil.* At Taiping, Wray, fide Ridl. An erect herb, the species of S. E. Asia; in Peninsula the var. at 2b, 6b, 5g, 6k.

Striga hirsuta, *Benth.* At Taiping, Ridley's collector. A small herb of Indo-Malaya; in Peninsula common in grass.

Scoparia dulcis, *Linn.* 3500-4000′, B. & H. A woody herb of American origin; in Peninsula a common weed.

LENTIBULARIACEAE.

Utricularia minutissima, *Vahl.* Larut, Kunstl., fide Ridl. A minute herb, endemic, 8g, 8j, 6k, 7k.

GESNERACEAE.

Aeschynanthus Hildebrandtii, *Hemsl.* 4000-4100′, Ridl., H. & N. 2347; flr. Feb., June, fruit Feb. A creeping epiphyte of Burma; in Peninsula 6g.

Aeschynanthus obconica, *Clarke.* 2000-3200′, Kunstl. 2849, Curt. 2990 (Batu Kurau), B. & H. 12798; flr. March, Oct., Dec. An epiphytic creeper of Borneo; in Peninsula 4d, 3f, 4f, 4h, 5h.

Aeschynanthus parvifolia, *R. Br.* 2000-4500′, all collectors; flr. Feb., March, Sept., Oct., Dec. An epiphytic creeper of W. Malaysia; in Peninsula common.

Aeschynanthus perakensis, *Ridl.* 2000-4500′, Kunstl. 3641, 7022, Curt., Ridl. 11447, Anders. 95; flr. March, Sept., Dec., fruit Dec. A small shrub, endemic, 4e, 4f.

Aeschynanthus purpurascens, *Hassk.* At 2000′, Ridl., fruit June. An epiphyte of W. Malaysia; in Peninsula 6d, 4f, 5h, 7l, 9m.

Aeschynanthus rhododendron, *Ridl.* 300-4750′, all collectors; flr. Feb.-April, Sept., Oct., Dec., fruit July, Oct. A small erect shrub, endemic, 4e.

Agalmyla staminea, *Bl.* 1000-4000′, all collectors; flr. Feb., Sept., Oct., fruit Sept., Dec. A creeper on trees, of W. Malaysia; in Peninsula 4e, 5g.

Didissandra frutescens, *Clarke.* 300-3000′, Wray 1723, Curt., Ridl. 2912, Hend. 10449; flr. and fruit Feb., Dec. A small shrub of Sumatra; in Peninsula 2d, 4e, 3f, 4f, 6k.

Didissandra quercifolia, *Ridl.* 2000-4200′, all collectors; flr. Feb., March, May, Aug., Sept. A woody stemmed herb, endemic and local.

Didymocarpus albomarginata, *Hemsl.* 200-4400′, all collectors; flr. Jan., Feb., June, Sept., fruit Jan., June, Oct. A herb, endemic, 5h.

Didymocarpus alternans, *Ridl.* 500-3000′, Kunstl. 2311, Curt.; flr. Dec., fruit Sept., Dec. A herb, endemic, 4f.

Didymocarpus corchorifolia, *R. Br.* G. Hijau, Scort. 1266, fide Ridl. A small shrub, endemic, 2d, 4f, 6j, 8l. Ridley in his Flora says "Taiping Hills, all collectors," but there is no specimen from Taiping Hills in Herb. Singap.

Didymocarpus crinita, *Jack.* 3000-4000′, all collectors; flr. Feb., March, Aug., Sept. A herb of Sumatra and Borneo; in Peninsula common.

Didymocarpus flava, *Ridl.* 2000-4200′, all collectors; flr. Jan.-March, Aug., Sept., Dec. A woody herb of Lower Siam; in Peninsula 4f.

Didymocarpus hirsuta, *Ridl.* Larut Hills, Kunstl., fide Ridl. A woody herb, endemic, 4f.

Didymocarpus hispida, *Ridl.* 3700-4600′, Kunstl. 2417, 8429, Curt. 2037, Ridl., Anders. 32, Hervey, B. & H. 12594, 12667, 12749, 12751, 12876, 12879; flr. Jan., Feb., March, Sept., fruit Sept. A herb, endemic, 4d, 4e, 4f, 5g.

Didymocarpus malayana, *Hook. fil.* 500-3000′, Curt. 2039, Haniff 13136; flr. Sept., fruit March. A shrublet, endemic, 4e, 4f, 5g, 5h.

Didymocarpus parviflora, *Ridl.* At 4000′, Curt., fide Ridl. A woody herb, endemic, 6j.

Didymocarpus reptans, *Jack,* var. monticola, *Ridl.* 200-4000′, all collectors; flr. Jan., March, June, July, Sept., fruit March, Oct. A creeping herb of Sumatra and Java; in Peninsula the var. at 3f, 4f, 5g, 5h, 6j, the species at 2d, 5g, 5h.

Didymocarpus serratifolia, *Ridl.* At 1000′, Ridl. 11922 (not seen). A woody herb, endemic and apparently also from 7g.

Didymocarpus sulphurea, *Ridl.* G. Hijau, Scort. 6a; fruit Aug. A woody herb, endemic, 4e, 4f, 5g.

Didymocarpus urticaefolia, *Ridl.* Up to 4000′, Curt., fide Ridl. A herb, endemic, 4d.

Chirita caliginosa, *Clarke.* At Batu Kurau, Scort. 1582; fruit Dec. A soft herb on limestone, endemic, 4d, 4e, 4f, 5h.

Chirita elata, *Ridl.* 3000-4000′, Curt. 2038, Ridl. 2911, H. & N. 2353, Hend. 10109, B. & H. 12566, 12990; flr. Feb., March, Sept., Oct., fruit Jan. A rough herb, endemic and local.

Chirita Glasgovii, *Ridl.* At Waterloo, Robertson-Glasgow; flr. and fruit Dec. A weak herb, endemic and local.

Loxocarpus caerulea, *Ridl.* 4000-4700′, Scort. 1427, Kunstl. 6990, Ridl., Anders. 3, B. & H. 12881; flr. Feb., March, Oct., Dec. A stemless herb, endemic, 3d, 6e, 4f, 5h.

Paraboea capitata, *Ridl.*, var. oblongifolia, *Ridl.* At Batu Kurau, Scort. 1581; fruit Dec. A stemless herb on limestone, endemic, the species at 4f, 5h, the var. at 4e, 4f.

Paraboea cordata, *Ridl.* 2300-4500′, all collectors; flr. Feb., March, July, Aug., Oct. A tall herb, endemic, 2c, 2d, 4d, 7k.

Boea paniculata, *Ridl.* At Batu Kurau, Scort. 1611; fruit Dec. A shrublet up to 1′, on limestone, endemic, 4e, 5h.

Rhynchoglossum obliquum, *Bl.* At about 4000′, Fox; flr. and fruit Oct. A succulent herb of S. E. Asia; in Peninsula 4f.

Epithema saxatile, *Bl.* At Batu Kurau, Scort. 1580; flr. Dec. A herb of W. Malaysia; in Peninsula 1b, 2d, 4e, 4f, 6g, 5h.

Monophyllaea Horsfieldii, *R. Br.* At Batu Kurau, Scort. 1579; flr. Dec. A succulent herb, usually on limestone, of Sumatra and Java; in Peninsula 4b, 4e, 4f, 5h.

Monophyllaea patens, *Ridl.* At Batu Kurau, Scort., fide Ridl. A succulent herb on limestone, endemic, 4e 4f, 5h.

Stauranthera grandiflora, *Benth.* 1000-1500′, Kunstl. 2248; flr. Aug. A succulent herb of Burma; in Peninsula 2d, 6e, 4f.

Rhynchotecum parviflorum, *Bl.* 1500-2000′, Kunstl. 2237, Ridl.; flr. Aug., fruit Dec. A small shrub of Sumatra and Java; in Peninsula 2d, 6d, 6e, 4f.

Cyrtandromoea acuminata, *Benth. and Hook.* 100-2000′, all collectors; flr. Jan., April, June, Aug., Dec. A small weak shrub of Sumatra; in Peninsula common in the North.

Cyrtandromoea megaphylla, *Hemsl.* Waterfall Hill, Wray 43. A bush, endemic, 2c, 4f, 5g, 5h.

Cyrtandra cupulata, *Ridl.* 300-3000′, Scort. 366, Kunstl. 1940, 2057; flr. April, June, fruit July. A shrub, endemic and common.

Cyrtandra dispar, *DC.* 100-4000′, Scort. 367, Kunstl. 2052, 3891, 5131, Ridl., Anders. 124, B. & H. 13013; flr. March, April, fruit Feb., July, Nov. A small shrub, endemic, 2d, 4f.

Cyrtandra pendula, *Bl.* At 2000′, Curt. 2036; flr. Sept. A woody herb of Sumatra and Java; in Peninsula, Taiping to Singapore.

Cyrtandra pilosa, *Bl.* 100-4000′, all collectors; flr. Jan.-March, June, Oct., fruit March. A small shrub of Malaysia; in Peninsula common.

BIGNONIACEAE.

Pajanelia multijuga, *DC.* At base of Taiping Hill, Hend. 10388, Cubitt's coll. C.F.947; flr. Jan., Dec., fruit Dec. A tree up to 80′, endemic, 2d, 4d. Ridley's specimen from Kranji, Singapore is not this.

Radermachera amoena, *Seem.* At Taiping, Wray, Scort. 1496; fruit Nov. A tree up to 80′, of Indo-Malaya; in Peninsula 2b, 5h, 6k, 9m.

Radermachera stricta, *Zoll. and Mor.* At 200′, Wray 2143; fruit June. A tree up to 30′, of Indo-Malaya; in Peninsula 2d, 4d, 6e, 4f, 5h, 6j, 6k.

PEDALINACEAE.

Sesamum indicum, *DC.* At Taiping, Hend. 10092; fl and fruit Jan. An erect herb, cultivated in all tropics.

ACANTHACEAE.

Thunbergia fragrans, *Roxb.* At about 3800′, B. & H. A sprawler of India; probably an escape from cultivation here.

Staurogyne arcuata, *Clarke.* 2000-4500′, Wray 694, Curt., Ridl. 2892; flr. June, fruit Feb., Sept. A creeping ascending herb, endemic, 4d, 4f.

Staurogyne lasiobotrys, *Kuntze.* Up to 4500′, Curt. 1350 (Waterloo), Ridl.; flr. Dec., fruit March. A small shrub of Burma; in Peninsula 1b, 6c, 4d, 5h, 5j, 0j.

Staurogyne macrantha, *Clarke.* 4500′ and upwards, Kunstl., fide Ridl. A herbaceous shrublet, endemic and local.

Staurogyne pauper, *Clarke.* At 200′, Kunstl., fide Ridl. An erect herb, endemic and local.

Staurogyne setigera, *Kuntze.* At 300′, Ridl. 14431; flr. Aug. A creeping herb of W. Malaysia; in Peninsula common.

Staurogyne subglabra, *Clarke.* 3600-4500′, Curt., Ridl., Hervey, H. & N. 2340, B. & H. 12872; flr. Feb., Dec., fruit Dec. An erect herb of Borneo; in Peninsula 2c, 4f, 5h.

Strobilanthes bibracteatus, *Bl.* 4000-4700′, Ridl. 5516, Anders. 2, Kloss, B. & H. 12899; flr. Feb., May, June, fruit March. An undershrub of Sumatra and Java; in Peninsula 3e only.

Strobilanthes collinus, *Nees.* At about 4500′, Ridl.; flr. and fruit March. A big herb or shrub, endemic, 1b, 2d, 6d.

Strobilanthes flaccidifolius, *Nees.* At Batu Kurau, Haniff 13255. A herb, cultivated for blue dye in Upper Perak and Kelantan; native of Indo-China and S. China.

Strobilanthes hirtisepalus, *Clarke.* Taiping Hills, Kunstl., fide Ridl. An undershrub, endemic, 2c, 4f, 5g, 5h.

Strobilanthes Maingayi, *Clarke.* At Maxwell's Hill, Kloss. An undershrub up to 3′, endemic, 1b, 2d, 5g, 5h.

Strobilanthes rufo-pauper, *Clarke.* 3000-4500′, Ridl. 5515, Hervey, Curt., Anders. 26, B. & H. 12974; flr. March, Sept. A creeping herb, endemic, 4f.

Strobilanthes rufo-sepalus, *Clarke.* Taiping Hills, Ridl.; flr. Dec. A herb, endemic, 2d, 4d, ?4e, 5g.

Phlogacanthus brevis, *Clarke.* At 300′, Kunstl., fide Ridl. An undershrub, endemic and local.

Gymnostachyum magis-nervatum, *Clarke.* Larut, Kunstl., fide Ridl. A herb, endemic and local.

Pseuderanthemum caudifolium, *Ridl.* At Taiping, Scort. 1531. Curt.; flr. Sept., Nov. A shrub up to 5′, of Lower Siam; in Peninsula 3f, 4f.

Gendarussa vulgaris, *Nees.* At 300′, Hend. 10317; flr. Aug. A bush of S. E. Asia; in Peninsula common in or near cultivation.

Justicia Clarkeana, *Ridl.* 3000-3200′, Kunstl., fide Ridl. A tall herb, endemic and local.

Justicia Maingayi, *Clarke.* At Taiping, Ridl. 14432, Anders. 93; flr. March, Aug., fruit Aug. A slender shrub, endemic, 2d.

Justicia ptychostoma, *Nees,* var. auriculata, *Clarke.* At Taiping, Kunstl., fide Ridl. A herb, endemic, the species common, the var. at 4e, 3f.

Justicia pubiflora, *Clarke.* 4000-4700′, Ridl., Anders. 11, B. & H. 12863; flr. Feb., March, Dec. A herb, endemic, 8l, 8m.

Justicia Scortechinii, *Clarke.* At 3000′, Scort., fide Ridl. A herb, endemic and local.

Peristrophe acuminata, *Linn.* At Batu Kurau, Haniff 10553; flr. May. A herb up to 3′, of Indo-Malaya; in Peninsula common.

VERBENACEAE.

Lantana aculeata, *Linn.* At Taiping and at 3800′, Hend., B. & H. A prickly bush, pantropic, of S. American origin; in Peninsula common in waste ground.

Stachytarpheta jamaicensis, *Vahl.* At Taiping, Hend. 10034; flr. all the year. A small shrub, pantropic, of S. American origin; in Peninsula common.

Callicarpa angustifolia, *King and Gamble.* At Batu Kurau, Scort., fide Ridl. A shrub on limestone, endemic, 1b, 4e, 5h.

Callicarpa arborea, *Roxb.* At 200′, Hend. 10037; flr. Jan. A tree up to 60′, of Indo-Malaya; in Peninsula 6b, 2c, 2d, 3f, 6g, 6j.

Callicarpa cana, *Linn.* At Taiping, Ridl. (not seen). A shrub of Malaysia to Australia; in Peninsula 2b, 2d, 7g, 5j, 6k.

Premna Derryana, *King and Gamble.* At 3700′, Derry, B. & H. 12972; flr. March. A climbing shrub, endemic and local.

Premna sterculifolia, *King and Gamble.* At 300′, Wray, Kunstl., fide Ridl. A shrubby climber, endemic and local.

Gmelina villosa, *Roxb.* At Changkat Serdang, Wray, fide Ridl. A shrub or small tree, of Indo-Malaya to the Philippines: in Peninsula common.

Clerodendron deflexum, *Wall.* At 700′, Hend. 10004, 10426: flr. and fruit Jan., Oct. A small shrub of Pulau Battam; in Peninsula common.

Clerodendron disparifolium, *Bl.* 100-3000′, Curt. 2043, Hend. 10303, B. & H.; flr. Aug., fruit Aug., Sept. A tree up to 20′, of W. Malaysia; in Peninsula common.

Clerodendron myrmecophilum, *Ridl.* 100-1080′, Ridl., Hend. 10035; flr. Jan., Aug. A shrublet, endemic, 8d, 9l, 8m, 9m.

Clerodendron paniculatum, *Linn.* 300-800′, Kunstl. 6437, fide King and Gamble. A tall shrub of Java; in Peninsula 2c, 2d, 4f, 5g, 5h, 6j, and sometimes cultivated.

Clerodendron penduliflorum, *Wall.* At Batu Kurau, Scort., fide Ridl. A small shrub of Burma and Tenasserim; in Peninsula 4b, 2c, 2d, 6d, 5h.

Clerodendron Ridleyi, *King and Gamble.* Larut, Kunstl., fide Ridl. A shrub or small tree of Borneo; in Peninsula 5h.

Clerodendron serratum, *Spreng.* var. Wallichii, *Clarke.* Taiping, Scort. 107, fide King and Gamble. A bushy shrub of Indo-Malaya; in Peninsula 6c, 4e, 6e, 4f, 5g, 5h.

Clerodendron umbratile, *King and Gamble.* At 3000′, Derry (Curt. 3704); flr. Sept. A shrub of Sumatra; in Peninsula 4f, 5h, 6k.

Vitex coriacea, *Clarke.* At 1000′, Wray 2225, fide King and Gamble. A tree, endemic, 2c, 4f, 6k, 9m.

Vitex gamosepala, *Griff.* 500-1000′, Scort. 445, 1480, Kunstl. 1841, fide King and Gamble. A small tree of Sumatra and Borneo; in Peninsula 5g, 8g, 5h, 6k, 9m.

Vitex heterophylla, *Roxb.* Up to 1000′, Kunstl., fide King and Gamble. A tree up to 80′, of Indo-Malaya; in Peninsula 4f.

Vitex longisepala, *King and Gamble.* 500-2000′, Curt., Ridl. 2984, Anders. 104, Cubitt C. F. 1152, Hend. 10019, 10479; flr. Feb., March, Oct., fruit Jan., May. A tree, endemic, Penang to Malacca.

Vitex peralata, *King.* Larut, on low ground, Kunstl. 2064, 6187, 6874, 8299, fide King and Gamble. A spreading tree, endemic, Taiping to Singapore.

Vitex pteropoda, *Miq.* Larut, on low ground, Kunstl. 5249, 6668, fide King and Gamble. A spreading tree of Sumatra; in Peninsula 8h, 9m.

Vitex pubescens, *Vahl.* At about 200′, Hend. 10209, Haniff 13271 (Batu Kurau); fruit May, Sept. A bushy tree of Indo-Malaya to the Philippines; in Peninsula common.

Vitex siamica, *Williams.* At Batu Kurau, Scort. 1618, fide King and Gamble. A tree, on limestone, endemic, 1b, 5h.

Sphenodesme triflora, *Wight.* At Taiping, Wray, Kunstl., fide Ridl. A climber or erect shrub of Sumatra and ?Borneo; in Peninsula common.

LABIATAE.

Hyptis brevipes, *Poit.* At Taiping, Wray 3051; flr. Sept. A herb up to 3′, pantropic, of S. American origin; in Peninsula common.

Hyptis suaveolens, *Poit.* At Taiping, Hend. 10324; flr. Aug. A herb of Trop. America and S. E. Asia; in Peninsula common.

Coleus atropurpureus, *Benth.* At Taiping, Hend. 10107; flr. Jan. A small herb of Malaysia; in Peninsula common.

Dysophylla auricularia, *Bl.* At Taiping, Wray, fide Ridl. A herb up to 3′, of S. E. Asia; in Peninsula common.

Calamintha gracilis, *Benth.* Up to 3400′, Ridl. 11912, Anders. 89, B. & H. 12812; flr. Feb., March. A slender creeper of Assam and Java; in Peninsula 3e only.

Leucas zeylanica, *R. Br.* At Taiping, Hend. 10160; flr. April. A herb of S. E. Asia; in Peninsula very common.

Paraphlomis rugosa, *Prain.* 500-3000′, Scort. 339, Kunstl. 2372, Curt. 2726, Ridl. 2892, Anders. 112; flr. Sept., fruit March. A shrub of Indo-Malaya; in Peninsula 4f.

Gomphostemma crinitum, *Wall.* At about 200′, Wray 3340, Hend. 10058; flr. Jan., Feb., fruit Jan. A woody herb of Tenasserim; in Peninsula common in hill forests.

Gomphostemma Curtisii, *Prain.* 2000-4300′, Curt. 1310, Fox 173, Ridl.; flr. Feb.-March, Oct., fruit Dec. A woody herb, endemic, 2d, 4f, 5g.

Gomphostemma microcalyx, *Prain.* 1800-2000′, Kunstl. 2155, fide King and Gamble, Ridl. A large herb of Borneo; in Peninsula 4f.

Gomphostemma Scortechinii, *Prain.* Up to 4500′, Scort., Kunstl., fide Ridl. A woody herb of Tenasserim; in Peninsula 6d.

AMARANTACEAE.

Deeringia celosioides, *Brown.* At Batu Kurau, Scort., fide Ridl. A sprawler on limestone, of Indo-Australia; in Peninsula 5h.

Deeringia indica, *Zoll.* At Waterloo, Curt. 2691; flr. and fruit May. A small shrub of W. Malaysia and Philippines; in Peninsula 2b, 4e, 4f, 6g, 5h.

Cyathula prostrata, *Bl.* At Taiping, Hend. A straggling herb, pantropic; in Peninsula common in open ground.

Psilotrichum trichotomum, *Bl.* At Maxwell's Hill, Ridl. Cultivated. A flaccid herb of Indo-Malaya to the Philippines; in Peninsula 1a, Ulu Kal, Perak.

Aerua Curtisii, *Oliv.* 500-1000′, Waterloo, Curt.; fruit May. A straggling herb, endemic, 4d.

POLYGONACEAE.

Polygonum capitatum, *Ham.* At 4000′, B. &. H. 12961; flr. March. A herb of Himalaya, not previously recorded from the Peninsula. Doubtless introduced.

ARISTOLOCHIACEAE.

Apama corymbosa, *Soler.* 100-3000′, Kunstl. 2875, Curt. 2045, H. & N. 2301, Hend.10010; flr. Jan.-March, Sept., fruit Jan., March. A shrub of Sumatra; in Peninsula, Penang to Malacca.

Thottea dependens, *Klotzsch.* 300-1000′, Ridl., B. & H.; flr. March. A shrub, endemic, 2d, 3f, 4f, 7k, 9m.

Aristolochia minutiflora, *Ridl.* 100-3300′, Kunstl., fide Ridl. (the species), Wray 2997, Kunstl., fide Gamble (var. dolobrata). A slender climber, endemic, 3f, the var. at 3e only.

CYTINACEAE.

Rafflesia Hasseltii, *Suringar.* Taiping Hill, Cantley, Wray, fide Ridl. A parasite of Sumatra; in Peninsula 4d.

NEPENTHACEAE.

Nepenthes ampullaria, *Jack.* At 100′, Kunstl. 1943; flr. June. A climber of Malaysia; in Peninsula 2d, 4e, 8g, 5h, 6k, 9l, 9m.

Nepenthes gracilis, *Korth.* 100-300′, Kunstl., 1941, 4019, 4025, Hend. 10050; flr. March. A slender climber of W. Malaysia; in Peninsula common in low country.

Nepenthes Rafflesiana, *Jack.* At 4400′, Fox 182, Derry; flr. and fruit Oct. A climber of Sumatra and Borneo; in Peninsula 5g, 8h, 6k, 7k, 8l, 9l, 9m.

Nepenthes sanguinea, *Lindl.* 4400-4750′, Wray, Kunstl. 3316. Curt. 2044, Fox 183, Ridl., Derry, Anders. 62, B. & H. A climber of Borneo; in Peninsula 6e, 4f, 5g, 6g, 5h, 7k.

PIPERACEAE.

Peperomia Maxwellana, *C. DC.* At about 2500′, Ridl. 5481; flr. June. A small herb, endemic and local.

Piper acre, *Bl.* 1000-4000′, Curt., fide Ridl. A slender climber of Java; in Peninsula 3e only.

Piper Betle, *Linn.* At 1500′, Waterloo, Curt. 2701; fruit May. Sirih. A climber extensively cultivated in S. E. Asia.

Piper boehmeriaefolium, *Wall.* 500-1500′, Kunstl. 2231, 2257, fide C. de Candolle. An erect shrub of E. Himalaya to Siam; in Peninsula 4d, 6g, 5j.

Piper Curtisii, *C. DC.* At about 2000′, Curt. 2699, Ridl.; fruit May. A slender creeper, endemic, 4d, 5h, 6k, 9l.

Piper eucolyptolimbum, *C. DC.* 2800-3000′, Kunstl. 3228, fide C. de Candolle. A climber, endemic and local.

Piper filipes, *C. DC.* 3200-3500′, Kunstl. 3122, fide C. de Candolle. A creeper, endemic and local.

Piper flavimarginatum, *C. DC.* Taiping Hills, Ridl.; fruit Feb. A climber, endemic, 6f, 9m.

Piper gymnocladum, *C. DC.* At about 2500′, Ridl. 5479; flr. June, fruit June, Dec. A climber, endemic and local.

Piper kotanum, *C. DC.* At Kota, Wray 1947, fide C. de Candolle. A climber?, endemic and local.

Piper larutanum, *C. DC.* Larut, Kunstl. 3327; flr. and fruit Sept., fide C. de Candolle. A climber on trees, endemic and local.

Piper longamentum, *C. DC.* 1800-3000′, Kunstl. 3207 1 (?); flr. Aug., fide C. de Candolle. A climber?, endemic and local. Kunstler's number as quoted by de Candolle is almost certainly a mistake.

Piper longibracteum, *C. DC.* At 3000′, Wray 101. A long climber, endemic, 4d.

Piper magnibaccum, *C. DC.* 3900--4000′, Curt. 2046, Ridl. 5480, Anders. 158, B. & H. 13012; flr. and fruit March, Sept. A climber, endemic, 4e, 4f, 5g.

Piper Maxwellanum, *C. DC.* At 2500′, Wray 1734. A climber, endemic and local.

Piper miniatum, *Bl.* 100-4000′, Curt., Ridl. 2962, Anders. 82; flr. March, Oct. A climber of Java; in Peninsula common.

Piper minutistigmum, *C. DC.* Larut, Kunstl. 2388; flr. and fruit Sept., fide C. de Candolle. A large climber, endemic and local.

Piper muricatum, *Bl.* 200-1000′, Wray 2076, Ridl., Hend. 10001, 10060; fruit Jan., March. A herb of W. Malaysia; in Peninsula common.

Piper nigrum, *Linn.* At Waterloo, Curt. 2700; fruit May. Black pepper, cultivated, a native of S. India.

Piper penangense, *C. DC.* 3000-4700′, Ridl., Anders. 72, B. & H. 12668, 12897; flr. Feb., March, fruit Feb. A small shrub, endemic, 2d, 3d, 4d.

Piper porphyrophyllum, *N. E. Br.* 200-4500′, Curt. 2048, Haniff 10552, Hend. 10003, 10069; flr. Sept., fruit Jan. A climber of Borneo; in Peninsula common.

Piper ramipilum, *C. DC.* Larut, Kunstl., fide C. de Candolle. A creeper up to 20′, endemic, 2d, 4d, 4f, 6k, 7l, 9m.

Piper ribesioides, *Wall.* 200-1000′, Wray 2184, 4244, Kunstl., fide C. de Candolle. A creeper on trees, of Tenasserim and Sumatra; in Peninsula common.

Piper Ridleyi, *C. DC.* 300-4500′, Curt. 2047, Ridl. 14503, Anders. 147, B. & H. 12693; flr. March, Aug., Sept., fruit March, May, Aug. An erect shrub, endemic, 4d, 4f, 5g, 4h, 9m.

Piper Scortechinii, *C. DC.* 2800-3000′, Scort. 285, Kunstl. 3230, fide C. de Candolle. A slender climber, endemic, 4f.

Piper semangkoanum, *C. DC.* At 4000′, Ridl. An erect shrublet, endemic, 5g.

Piper stylosum, *Miq.* 200-4700′, Wray 8, Curt. 2049, Ridl., Anders. 37, B. & H. 12874, Haniff 13281; flr. Feb., May, fruit March, Sept. A small erect shrub of Sumatra and Borneo; in Peninsula common.

Piper umbellatum, *Linn.* At Waterloo, 1500′, Curt. 2698; fruit May. An erect shrub, pantropic; in Peninsula 2d, 6d, 6f, 5g, 5h, 6j.

Piper velutinervium, *C. DC.* 1800-2000′, Kunstl. 2193, 2196; flr. and fruit Aug., fide C. de Candolle. An erect? pepper of Sumatra; in Peninsula 3e only.

CHLORANTHACEAE.

Chloranthus officinalis, *Bl.* 3000-3700′, B. & H.; fruit Feb. A shrub of Indo-Malaya; in Peninsula common.

MYRISTICACEAE.

Horsfieldia brachiata, *Warb.* Larut, Kunstl., fide Ridl. A tree up to 60′, endemic, 6k, 9m.

Horsfieldia fulva, *Warb.*, var. paludicola, *Warb.* Larut, Kunstl., fide Ridl. A tree up to 60′, endemic, the var. at 4f, 9m, the species at 4f, 6k.

Horsfieldia Irya, *Warb.* At 300′, Kunstl. 7447; flr. April. A tree of Indo-Malaya; in Peninsula common.

Horsfieldia Lehmanniana, *Warb.* At Taiping, Wray 2088; flr. June. A tree up to 50′, endemic, 4f, 5g, 6k, 9m.

Horsfieldia majuscula, *Warb.* At 2000′, Wray 2218, Ridl. 11919; flr. Feb. A tree about 50′, endemic, 2d, 4f, 9m.

Horsfieldia subglobosa, *Warb.* At 100′, (up to 2000′, fide Ridl.) Kunstl. 6672; fruit October. A tree up to 70′, of Sumatra; in Peninsula 6k, 8l.

Horsfieldia sucosa, *Warb.* At 300′, Kunstler 4078; fruit April. A tree up to 100′, endemic, 2d, 4f, 6k, 9m.

Gymnacranthera Farquhariana, *Warb.* 100-3000′, Wray, 2084, 2399, Kunstl. 5408, 6622, 6652, 7481; flr. April, Sept., fruit Jan., June, July, Sept. A tree up to 60′, endemic and common.

Gymnacranthera Forbesii, *Warb.* 300-1000′, Kunstl. 3783, 6591; flr. Sept., fruit Jan. A tree up to 80′, of Sumatra; in Peninsula 2d, 3d, 4f, 6f, 6k, 9m.

Myristica cinnamomea, *Warb.* 500-1500′, Wray 2056, Kunstl. 5170, 6440; fruit Nov. A tree up to 90′, endemic and common.

Myristica crassa, *King.* At 2000′, Wray 646. A tree up to 80′, endemic, 4f, 6j, 6k, 9m.

Myristica elliptica, *Wall.* 200-400′, Wray 1736, 2345; flr. and fruit April. A tree up to 80′, of Sumatra and Borneo; in Peninsula common.

Myristica maxima, *Warb.* 300-800′, Kunstl. 5513; fruit Feb. A tree up to 70′, of Borneo; in Peninsula 2d, 9m.

Knema Cantleyi, *Warb.* At 100′, Kunstl. 5614; flr. Feb. A tree up to 50′, endemic, 2d, 5h, 9m.

Knema conferta, *Warb.* At Taiping, Wray 2377; flr. July. A tree up to 40′, of Tenasserim, Siam and Borneo; in Peninsula common.

Knema Curtisii, *Warb.* Taiping Hill, Ridl. 14681; fruit Aug. A small tree, endemic, 2d, 6k, 9m.

Knema furfuracea, *Warb.* 800-1200′, Kunstl. 5600; flr. Feb. A tree about 30′, of Sumatra and Borneo; in Peninsula common.

Knema intermedia, *Warb.* At 100′, Kunstl. 6371, 7576; fruit May, July. A tree up to 50′, of W. Malaysia; in Peninsula common.

Knema Kunstleri, *Warb.* 500-3000′, Wray 2056, Kunstl. 4150, 6440, Curt. 2051, Haniff 13127; flr. March, April, fruit June, Sept. A tree up to 20′, endemic, 4f, 5h, 6k.

Knema laurina, *Warb.* At Waterloo, Curt. 2728; fruit May. A tree up to 60′, of W. Malaysia; in Peninsula common.

Knema oblongifolia, *Warb.* Taiping Hills, Ridl. (not seen). At 3000′, Curt. 2050 (var. monticola); fruit Sept. A shrub, endemic, the species common, the var. at 4f.

Knema Wrayi, *Warb.* At 100′, Kunstl. 6521; fruit Aug. A tree up to 30′, endemic, 4f, 5h, 6k, 7l, 9m.

MONIMIACEAE.

Matthea sancta, *Bl.* 2500-3000′, Wray 2811, B. & H. 12826; flr. and fruit March. A shrub or tree of Borneo; in Peninsula, 8h, 6k, 7l, 9m.

LAURACEAE.

Cryptocarya crassinervia, *Miq.* 100-500′ (to 3000′, fide Gamble), Kunstl. 5729, 6579; flr. Sept., Nov. A tree up to 60′, of Sumatra and Borneo; in Peninsula 3f, 4f, 5h.

Cryptocarya densiflora, *Bl.* 500-800′, Kunstl. 3605. A tree up to 60′, of Java, Borneo, Philippines; in Peninsula 5g.

Cryptocarya Kurzii, *Hook. fil.* 100-300′, Kunstl. 5320, 5395; flr. Jan., fruit Dec. A tree up to 40′, of Tenasserim to Borneo; in Peninsula 4f, 8j, 6k, 9l, 9m.

Cryptocarya rugulosa, *Hook. fil.* 500-1000′, Kunstl. 3749, 6279; flr. Jan., fruit July. A tree up to 50′, endemic, 2d, 3f, 6k.

Crytocarya Scortechinii, *Gamble.* 100-4000′, Kunstl. 6297, 6298, Ridl. 2966; flr. March, July. A tree up to 70′, endemic, 4f, 5g.

Beilschmiedia Foxiana, *Gamble.* At about 4000′, Fox (Ridl. 10705). A tree, endemic and local.

Beilschmiedia insignis, *Gamble.* At Taiping, Kunstl., fide Ridl. A tree up to 70′, endemic and local.

Beilschmiedia Kunstleri, *Gamble.* On low ground, Kunstl. 6854, fide Gamble. A tree up to 100′, endemic, 9m.

Beilschmiedia longipes, *Hook. fil.* 800-2000′, Kunstl. 5465. Ridl.; flr. Jan. A spreading tree up to 50′, endemic, 6k.

Beilschmiedia perakensis, *Gamble.* 500-800′, Kunstl. 8489; flr. Feb. A shrub or tree, endemic, 4f.

Beilschmiedia Scortechinii, *Gamble.* At 3700′, Scort. 483, 493, fide Gamble. A tree, endemic and local.

Dehaasia cuneata, *Bl.* At Taiping, Wray 2099, 2654, 3101, Kunstl. 6745, fide Gamble. A tree up to 50′, of Burma, Sumatra, Java; in Peninsula 1a, 3f, 5h.

Endiandra praeclara, *Gamble.* 100-4000′, Kunstl. 6714, H. & N. 2320; flr. Feb., Oct., fruit Feb. A tree up to 70′, endemic, 2d, 4f, 5h.

Cinnamomum cinereum, *Gamble.* 500-2000′, Wray 2629, Kunstl 8515, fide Gamble, Wray 4056; flr. April. A tree up to 70′, endemic and local.

Cinnamomum graciliflorum, *Gamble.* At about 4500′, Scort. 1228, fide Gamble. A tree, endemic, 4d.

Cinnamomum iners, *Reinw.* 100-800′, Kunstl. 3861, 6456, 6510; flr. Aug., fruit Feb. A tree about 40′, of Indo-Malaya to the Philippines; in Peninsula common.

Cinnamomum Kunstleri, *Ridl.* Within 100′, Kunstl. 5568, fide Ridl. A tree up to 40′, endemic and local.

Cinnamomum lampongum, *Miq.* Up to 800′, Kunstl. 4892, 6595, fide Gamble. A tree of Sumatra; in Peninsula 3e only.

Cinnamomum mollissimum, *Hook. fil.* 100-800′, Wray 2669, Kunstl. 6013, fide Gamble. A shrub or small tree, endemic, 2d, 4f.

Cinnamomum rhyncophyllum, *Miq.* Up to 500′, Kunstl. 3287, fide Gamble. A tree up to 50′, of Sumatra; in Peninsula 4f, 5g.

Alseodaphne insignis, *Gamble.* 800-1000′, Kunstl. 6958, 7273; fruit Feb., Dec. A tree up to 100′, endemic and local.

Alseodaphne paludosa, *Gamble.* Larut, Kunstl. 5378, fide Gamble. A tree up to 100′, endemic and local.

Alseodaphne Wrayi, *Gamble.* At Kota, Wray 2543, at Larut, Kunstl. 5493, 5917, fide Gamble. A tree up to 50′, endemic and local.

Nothaphoebe fruticosa, *Gamble.* At 2000′, H. & N. 2389; flr. Feb. A shrub or small tree, endemic, 4f, 5h.

Nothaphoebe Kingiana, *Gamble.* 500-3500′, Kunstl. 4938, H. & N. 2331; flr. Feb., Sept. A tree up to 40′, endemic and local; a var. at 3f.

Nothaphoebe panduriformis, *Gamble.* At Changkat Serdang, Wray, fide Ridl. A tree up to 50′, endemic, 4f, 6f, 5g, 8g, 8h, 6k.

Nothaphoebe reticulata, *Gamble.* At 4000′, Ridl. 2967, B. & H. 12865; flr. Feb. A tree up to 50′, endemic, 5g, 5h.

Nothaphoebe umbelliflora, *Bl.* 400-600′, Kunstl. 8484; flr. Feb. A tree up to 50′, of Siam to Borneo; in Peninsula common.

Machilus Scortechinii, *Gamble.* 3500-4000′, Scort. 492, Kunstl. 8413, fide Gamble. A tree up to 50′, endemic and local.

Phoebe cuneata, *Bl.* 100-4600′, Kunstl. 2646, 6249, 6577, 6995, Ridl., H. & N. 2342; flr. Jan., Feb., Dec., fruit June, Sept. A tree up to 80′, of Java; in Peninsula 2d, 4f, 5g, 5h, 7l, 9m.

Phoebe macrophylla, *Bl.* At Waterloo, Curt. 2727; fruit May. A bushy tree about 40′, of Java; in Peninsula 3f, 9m.

Stemmatodaphne perakensis, *Gamble.* Up to 1000′, Wray 2658, Kunstl., fide Gamble. A tree up to 70′, endemic, 4f, 6k.

Actinodaphne glomerata, *Nees.* At Larut, Kunstl., fide Ridl. A tree up to 40′, of Sumatra and Java; in Peninsula 9m.

Actinodaphne montana, *Gamble.* 3000-3500′, Kunstl. 2129, 2913, fide Gamble. A tree up to 70′, endemic and local.

Actinodaphne pruinosa, *Nees.* Waterfall Hill, Wray, fide Ridl. A tree up to 40′, endemic, 2d, 6k, 9m.

Actinodaphne sesquipedalis, *Hook. fil.* 500-4200′, Kunstl. 4399, 5147, Curt. 2053, Hend. 11811; flr. March, June, Sept., Nov. A tree up to 50′, of Lower Siam and Borneo; in Peninsula 2d 4f, 5h.

Litsea amara, *Bl.* At 2000′, Ridl. 2981; flr. Feb. A bush or small tree of Indo-Malaya; in Peninsula common and variable.

Litsea angulata, *Bl.* At 4100′, B. & H. 12866; flr. Feb. A tree up to 80′, of Java; in Peninsula 5h.

Litsea brachystachya, *Boerl.* 800-1000′, Kunstl. 6855; flr. Nov. A tree up to 50′, of Java; in Peninsula 3e only.

Litsea castanea, *Hook. fil.* 500-1500′, Kunstl. 4937, 6497; flr. Aug., Sept. A tree up to 100′; endemic, 4f, 5h, 6k.

Litsea citrata, *Bl.* 3000-4000′, Ridl. 11390, H. & N. 2323, B. & H. 12935, flr. Feb., Dec., fruit March. A small tree of Indo-Malaya and China; in Peninsula 4f, 5g.

Litsea claviflora, *Gamble.* 500-1000′, Kunstl. 8492, fide Gamble. A tree up to 40′, endemic and local.

Litsea cordata, *Hook. fil.* 100-200′, Kunstl. 3962, 6329; flr. Sept., fruit March. A tree up to 30′, of Sumatra and Borneo; in Peninsula 4f, 5h, 6k, 9l, 9m.

Litsea cylindrocarpa, *Gamble.* At 100′, Kunstl. 5500, 6673; flr. Jan., fruit Oct. A tree up to 130′, of Java and Borneo; in Peninsula 2d, 3f.

Litsea fenestrata, *Gamble.* Up to 800′, Kunstl. 5938, 6859, fide Gamble. A tree up to 100′, of Sumatra and Borneo; in Peninsula 3e only.

Litsea ferruginea, *Bl.* 300-800′, Kunstl. 6039, 6826; flr. May, fruit Nov. A tree up to 80′, of Java; in Peninsula 4f, 9m.

Litsea firma, *Hook. fil.* 400-500′, Kunstl. 6772, 7391, fide Gamble. A tree up to 100′, of W. Malaysia except Java; in Peninsula 6k, 9m.

Litsea gracilipes, *Hook. fil.* At 100′, Kunstl. 5421; fruit Jan. A small tree of Borneo; in Peninsula 8h, 6k, 9m.

Litsea Griffithii, *Gamble.* Larut, Kunstl., fide Gamble. A tree up to 60′, of Sumatra; in Peninsula 4f, 5h, 6k, 9l, 9m.

Litsea hirsutissima, *Gamble.* 100-2500′, Kunstl., Curt. 1344, fide Gamble. A shrub, endemic, 4f.

Litsea lancifolia, *Hook. fil.* 200-500′, Kunstl. 3233, 6609; flr. Aug., Sept. A bush or small tree of Indo-Malaya and China; in Peninsula 4f, 5h, 9l, 9m.

Litsea machilifolia, *Gamble,* var. angustifolia, *Gamble.* At 100′, Kunstl. 6815; fruit Nov. A tree up to 80′, endemic, the var. at 4f, 5g, the species at 2d, 6k, 9m.

Litsea megacarpa, *Gamble.* 100-500′, Wray 2337, Kunstl. 6124, 6237, 6409, 6567, 6866; flr. May, June, fruit July, Sept., Nov. A tree up to 60′, endemic 2d, 4f, 4h, 5h.

Litsea monticola, *Gamble.* 3500-4500′, Kunstl. 7000, 8454, fide Gamble. A tree up to 50′, endemic and local.

Litsea nidularis, *Gamble.* 800-1000′, Kunstl. 6883; fruit Nov. A tree, endemic, 2d, Ulu Kenat, Perak.

Litsea Noronhae, *Bl.* At Ulu Tupai, Wray, fide Gamble. A shrub or tree up to 50′, of Sumatra and Java; in Peninsula 3f, 4f, 5h.

Litsea oblanceolata, *Gamble.* Up to 300′, Kunstl. 1952, 2020, fide Gamble. A tree up to 40′, endemic and local.

Litsea panamonja, *Hook. fil.* At Waterloo, 1500′, Curt. 2694; flr. May. A tree up to 40′, of Assam to Lower Siam; in Peninsula 5g, 6k.

Litsea patellaris, *Gamble.* 400-800′, Kunstl. 7312, fide Gamble. A tree up to 60′, endemic and local.

Litsea perakensis. *Gamble.* Up to 800′, Kunstl., fide Gamble. A tree up to 40′, endemic, 4f, 9l, 9m.

Litsea pustulata, *Gamble.* Up to 800′, Kunstl. 2544, 3418, 5110, fide Gamble. A tree up to 30′, endemic and local.

Litsea spathacea, Gamble. Up to 3000′, (fide Gamble), Ridl. A small tree, endemic, 2d, 5h, 6j.

Litsea Teysmanni, *Gamble.* At low altitudes, Wray, Kunstl., fide Ridl. A tree up to 70′, of Bangka and Borneo; in Peninsula 6k.

Litsea Wrayi, *Gamble.* 800-1400′, Wray 4036; flr. April. A tree up to 80′, endemic and local.

Neolitsea villosa, *Gamble.* 4000-4500′, Kunstl. 7011; fruit Dec. A tree up to 30′, of Amboina and the Philippines; in Peninsula 3e only.

Lindera bibracteata, *Boerl.* At 4500′, H. & N. 2461; flr. Feb. A shrub up to 15′, of Java; in Peninsula 4d, 4f.

Lindera caesia, *Boerl.* 3500-4000′, Kunstl. 6951, Curt. 2052; flr. Sept., Dec. A small tree of Java and Borneo; in Peninsula 6e, 5g, 5h.

Lindera malaccensis, *Hook. fil.* 500-800′, Kunstl. 5139; flr. Nov. A tree up to 80′, of Sumatra and Borneo; in Peninsula 4f, 5g, 6k, 7l, 9m.

Lindera pipericarpa, *Boerl.* 3000-3500′, Scort., Kunstl., fide Ridl. A tree up to 40′, endemic, 4f, 5g.

HERNANDIACEAE.

Illigera appendiculata, *Bl.* At 3800′, B. & H. 12561; flr. March. A climber up to 80′, of Indo-Malaya; in Peninsula common.

PROTEACEAE.

Helicia attenuata, *Bl.* At 200′, Hend. 10210; flr. Sept. A shrub or tree of Java; in Peninsula 2d, 6e, 4f, 5h, 9l.

Helicia excelsa, *Bl.*, var. Forbesii, *Ridl.* At low altitudes, Kunstl. 3392, fide Gamble. A tree up to 80′, the species from Burma to Tenasserim, the var. in Sumatra and Cambodia; in Peninsula the var. in 3e only.

Helicia Kingiana, *Prain.* 500-1000′, Kunstl. 3714, 3881, 6217, fide Gamble. A tree up to 70′, endemic, 4f, 5g.

Helicia rufescens, *Prain.* 200-1500′, Wray 2083, 3084, Kunstl. 4213, 4939, 5096, 8504, fide Gamble. A tree up to 80′, endemic and local.

THYMELAEACEAE.

Daphne composita, *Gilg.* At about 4000′, Wray 510. A shrub or small tree of Indo-Malaya; in Peninsula 4f, 5g, 5h.

Wikstroemia Candolleana, *Meissn.* 4000-4700′, Curt. 2055 Ridl. 2900, Anders. 24, B. & H. 12658, 12965; flr. March, Sept. A shrub or small tree of Java; in Peninsula 3d, 4d, 6e, 4f, 5g, 6g.

Aquilaria malaccensis, *Lamk.* Larut, Kunstl., fide Ridl. A tree up to 80′, of W. Malaysia to Philippines; in Peninsula common.

LORANTHACEAE.

Loranthus coccineus, *Jack.* 300-800′, Wray 2582, Kunstl. 2323; flr. Sept. fruit July, Sept. A parasitic shrub of Indo-Malaya; in Peninsula common.

Loranthus crassipetalus, *King.* Larut Hills, Ridl. A parasitic shrub, endemic, 4f, 5h.

Loranthus ferrugineus, *Roxb.* At Taiping, Wray, Hend. 10002; flr. Jan. A parasitic shrub of W. Malaysia to Philippines; in Peninsula common.

Loranthus grandifrons, *King.* At 100′, Wray 1958, Kunstl. 2067; flr. May, July. A parasitic shrub of Lower Siam to Sumatra; in Peninsula 4f, 6f, 6g, 7g, 5j, 6k.

Loranthus heteranthus, *Wall.* 2500-3500′, Wray 3234, Kunstl. 6362. A parasitic shrub of Indo-Malaya; in Peninsula 2c, 4d, 4f, 8g, 8j.

Loranthus Lobbii, *Hook. fil.* 2000-4500′, Curt., Ridl. 2969, H. & N. 2384; flr. Feb., Sept. A parasitic shrub, endemic and common.

Loranthus malaccensis, *Hook. fil.* 3000-4000′, Kunstl. 6286. A parasitic shrub, endemic and common.

Loranthus obtectus, *Wall.* 4300-4750′, Fox 120, B. & H. 12670; flr. March, Oct. A parasitic shrub of Burma and Lower Siam; in Peninsula 4h, 6k, 9l.

Loranthus pentandrus, *Linn.* At about 1000′, Wray 2062; flr. and fruit June. A parasitic shrub of Indo-Malaya and S. China; in Peninsula common.

Loranthus pentapetalus, *Roxb.* 4000-4750′, Ridl. 2968, B. & H. 12891; flr. Feb. A parasitic shrub of Indo-Malaya and S. China; in Peninsula 4f, 5h, 8h, 6k.

Loranthus productus. *King.* 2500-3500′, Wray 2949, H. & N. 2327; flr. Feb. A parasitic shrub, endemic, 4f, 5g.

Loranthus pulcher, *DC.* 3000-4000′, Wray 3225, Kunstl. 6257, Fox 160, Ridl. 5231; flr. June, fruit Oct. A parasitic shrub of Tenasserim and Siam; in Peninsula 1a, 2d, 6e, 4f, 5g.

Elytranthe avenis, *G. Don.* At 4500′, Wray 645, fide Gamble. A parasitic shrub of Sumatra and Java; in Peninsula 2c, 6e, 4f, 6g.

Elytranthe diantha, *Gamble.* Up to 800′, Scort. 76, 604, Kunstl. 1870, 6446, fide Gamble. A parasitic shrub, endemic and local.

Elytranthe formosa, *G. Don.* 3000-4000′, Kunstl. 6264, Hervey. A parasitic shrub of Burma and Java; in Peninsula 4f, 5g, 7g, 5h.

Elytranthe Kunstleri, *Gamble.* At Taiping, Kunstl., fide Ridl. A bushy parasitic shrub of Borneo; in Peninsula 6e, 3f, 4f, 7g.

Lepeostegeres Beccarii, *Gamble.* At 3200′, B. & H. 13029; flr. March. A creeping parasitic shrub of Borneo; in Peninsula 4f.

Lepeostegeres Kingii, *Gamble.* At about 4500′, Scort. 1251, fide Gamble. A parasitic shrub, endemic, 6e, 4f, 5g, 6k, 9l.

Viscum dichotomum, *G. Don.* At 300′, Kunstl. 4191. A parasite on other Loranthaceae, of India and Burma; in Peninsula common.

Viscum orientale, *Willd.* At 2000′, Ridl. A bushy parasitic shrub of Indo-Australia and S. China; in Peninsula 2c, 2d, 4f, 8h, 6k, 9m.

SANTALACEAE.

Henslowia Reinwardtiana, *Bl.* At 100′, Kunstl fide Ridl. A parasitic climber of W. Malaysia; in Peninsula 3e only.

Henslowia umbellata, *Bl.* 800-1000′, Kunstl. 5213, fide Gamble. A climbing parasite of Siam and W. Malaysia; in Peninsula common.

Henslowia Wrayi, *Gamble.* 500-1000′, Kunstl., fide Ridl. A climbing parasite, endemic and local.

OPILIACEAE.

Lepionurus sylvestris, *Bl.* 300-2500′, Wray 2820, Kunstl. 5502, 8571, B. & H. 13032 (var.); flr. March. A small shrub of Siam, Java and Borneo; in Peninsula common.

BALANOPHORACEAE.

Balanophora ?multibrachiata, *Fawcett.* 4200-4700′, B. & H. A parasite of Sumatra; in Peninsula 4f, 5g, 6j, 9k.

Balanophora truncata, *Ridl.* At 3900′, B. & H. 12727; flr. March. A parasite, endemic, 4f, 5g, 5h. This specimen differs from typical B. truncata in the flr.-spikes being purplish-grey and not dirty yellow.

Rhopalocnemis ruficeps, *Ridl.* 2500-4000′, Ridl. (not seen). A fleshy parasitic herb, endemic, 2d.

EUPHORBIACEAE.

Euphorbia thymifolia, *Burm.* At Taiping, Wray, fide Ridl. A prostrate herb, pantropic; in Peninsula 2d, 8g, 6k, 9m.

Bridelia tomentosa, *Bl.* 100-500′, Kunstl. 2492, 2676, Ridl. 2977, Hend. 10021, 10111, 10138, 10224; flr. Oct., Nov., fruit Jan., Feb. A small tree of Indo-Australia; in Peninsula common.

Cleistanthus ellipticus, *Hook. fil.* 100-500′, Wray 2547, Kunstl. 3196, 5162; flr. July, Aug., fruit Nov. A tree up to 40′, endemic, 2d.

Cleistanthus Kingii, *Jabl.* 300-500′, Kunstl. 3064, 6744; fruit June, Oct. A shrub or tree up to 60′, endemic, 4e.

Cleistanthus membranaceus, *Hook. fil.* 200-500′, Kunstl. 1974, 3355, 3424, 6619; flr. June, Sept., Oct. A tree up to 30′, endemic, 2d.

Cleistanthus pedicellatus, *Hook. fil.* At Taiping, Wray, fide Ridl. A small tree, endemic, 2d.

Cleistanthus podocarpus, *Hook. fil.* At 100′, Kunstl. 6701; fruit Oct. A tree up to 70′, endemic and local.

Acetephila excelsa, *Müll. Arg.* Larut, Kunstl., fide Ridl. A shrub up to 8′, of India and Ceylon; in Peninsula 2d, 4e, 5h, 9m.

Andrachne australis, *Zoll.* 300-500′, Kunstl., fide Ridl. A small shrub of Indo-Australia; in Peninsula 3e only.

Phyllanthus frondosus, *Wall.* 2500-4700′, Wray 1856, Ridl., Anders. 66, B. & H. 12579; flr. March, June, Dec. A shrub up to 6′, of Siam, Lingga and Carimon Islands; in Peninsula common.

Phyllanthus gomphocarpus, *Hook. fil.* Larut, Kunstl., fide Ridl. A shrub up to 8′, of Siam; in Peninsula 1b, 3f, 4f, 5h, 6j, 6k, 7k.

Phyllanthus urinaria, *Linn.* 300-3800′, Hend. 10311, B. & H. 13005; flr. March, Aug. A small herb, pantropic; in Peninsula common.

Phyllanthodendron dubium, *Gage.* 300-2000′, Kunstl. 4941, Ridl. 2972, 14547; flr. Feb. fruit Aug., Sept. A shrub, endemic, 1b, 2c, 4e, 3f.

Glochidion coronatum, *Hook. fil.* 200-500′, Wray 1956, Kunstl. 6678; flr. May, Oct. A shrub up to 12′, of Tenasserim and Lower Siam; in Peninsula common on the West.

Glochidion desmocarpum, *Hook. fil.* At Changkat Serdang, Wray, fide Ridl. A tree up to 30′, endemic, 4f, 5h, 6k, 9m.

Glochidion laevigatum, *Hook. fil.* 2500-4750′, H. & N. 2376, B. & H. 12576, 12884; flr. Feb., March. A tree up to 50′, of Tenasserim; in Peninsula 2d, 4h, 5h, 6k, 0k, 7l, 9m.

Glochidion leiostylum, *Kurz.* At 100′, Kunstl. 5435; flr. Jan. A tree up to 25′, of Burma to Lower Siam; in Peninsula 1b, 4h, 5h, 6k, 9m.

Glochidion microbotrys, *Hook. fil.* 500-800′, Kunstl. 7479; fruit April. A tree up to 50′, of Lower Siam; in Peninsula 5h, 9m.

Glochidion perakense, *Hook. fil.* At Taiping, Wray 1683, Ridl.; flr. Feb. A tree up to 20′, endemic, 2b, 2d, 4f.

Glochidion sericeum, *Hook. fil.* At 300′, Wray 2327; fruit June. A small tree of W. Malaysia; in Peninsula common from Taiping to Singapore.

Flueggia microcarpa, *Bl.* At Ulu Tupai, Wray 2686; flr. and fruit Aug. A bush or small tree of Trop. Africa and Indo-Australia; in Peninsula common in the North.

Breynia angustifolia, *Hook. fil.* 200-1000′, Kunstl. 3949, Hend. 10230; fruit Nov. A shrub up to 10′, endemic, 4f.

Breynia coronata, *Hook. fil.* 3000-3500′, Kunstl. 2229; fruit Aug. A tree up to 20′, endemic and common.

Drypetes pendula, *Ridl.* 600-1500′, Kunstl. 3540, 6733; fruit Oct. A tree up to 60′, endemic, 2d, 5h, 9m.

Drypetes perakensis, *Gage.* Larut, Kunstl., fide Ridl. A shrub or small tree, endemic and local.

Antidesma alatum, *Hook. fil.* 1500-3000′, Wray 1675, 2794, Kunstl. 2211, 5010, Curt. 1322, Ridl. 2978, 5503; flr. Dec., fruit June, Aug., Oct. A tree up to 30′, of Lower Siam; in Peninsula common from Taiping southwards.

Antidesma coriaceum, *Tulasne.* 100-1500′, Wray 1854, Kunstl. 4212, 5372, 5422, 5598, 8394, 8470; flr. Jan., Dec., fruit Feb., May. A tree up to 30′, of Lower Siam and Borneo; in Peninsula common.

Antidesma cuspidatum, *Müll. Arg.* At 300′, Wray 1839; fruit April. A tree of Borneo; in Peninsula common.

Antidesma gracillimum, *Gage.* At about 2500′, Wray, fide Ridl. A small tree, endemic, 4d.

Antidesma Kunstleri, *Gage.* At about 2500′, Ridl. 2975. A shrub up to 9′, endemic, 4d.

Antidesma leucocladon, *Hook. fil.* Larut, Kunstl., fide Ridl. A shrub or small tree, endemic, 2d, 4e, 5g.

Antidesma montanum, *Bl.* 200-800′, Wray 2146, Kunstl. 2031; fruit June, July. A tree up to 40′, of Indo-Malaya; in Peninsula common at low altitudes.

Antidesma pachystachys, *Hook. fil.* 500-800′, Kunstl. 5778; fruit Nov. A shrub up to 15′, endemic, 2d.

Antidesma pendulum, *Hook. fil.* 300-800′, Wray 2559, 3284, Kunstl. 3460; flr. July. A shrub up to 8′, endemic, 4d, 4f, 9l.

Antidesma stipulare, *Bl.* Larut, Kunstl., fide Ridl. A shrub or small tree of W. Malaysia except Sumatra; in Peninsula 5h, 8l.

Antidesma tomentosum, *Bl.* 1500-2500′, Wray 2983, Kunstl. 3928; fruit Feb. A shrub or small tree of W. Malaysia; in Peninsula 4d, 6e, 4f, 7g, 9k, 7l, 9l.

Daphniphyllum lancifolium, *Hook. fil.* 4000-4600′, Kunstl. 7007. A tree up to 60′, endemic and local.

Daphniphyllum laurinum, *Baill.* At 4700′, B. & H. 12632; fruit March. A large shrub of Siam and W. Malaysia; in Peninsula common.

Aporosa arborea, *Müll. Arg.* Larut, Kunstl., fide Ridl. A tree up to 40′, of Sumatra and Java; in Peninsula 4d, 6f.

Aporosa Benthamiana, *Hook. fil.* Larut, Ridl. (not seen). A tree up to 80′, endemic, 2d, 5h 6k, 9m.

Aporosa falcifera, *Hook. fil.* Larut, Kunstl., fide Ridl. A tree up to 60′, of Borneo; in Peninsula 4f, 5h, 9m.

Aporosa frutescens, *Bl.* Larut, Barnard C.F.40; fruit Sept. A shrub or tree of Sumatra and Java, in Peninsula common.

Aporosa Miqueliana, *Müll. Arg.* 100-500′, Kunstl. 3322, 3501, 6658; flr. Oct., fruit Sept., Oct. A shrub or tree up to 40′, of Sumatra and Borneo; in Peninsula 4f, 5g, 5h, 9l.

Aporosa nigricans, *Hook. fil.* 300-800′, Kunstl. 3347, 3539; flr. Sept., Oct., fruit Sept. A tree up to 20′, of Borneo; in Peninsula common.

Aporosa pseudo-ficifolia, *Pax.* 100-3000′, Wray 2053, 2627, 3206, Kunstl. 2802, 3231, 5108, Ridl. 2973; flr. Feb., fruit June. A shrub up to 10′, endemic, 2d, 5g, 6k.

Aporosa stellifera, *Hook. fil.* At 300′, Kunstl. 3323; flr. Sept. A tree up to 30′, endemic, 2d, 4d, 4f, 5h, 8k.

Baccaurea bracteata, *Müll. Arg.* 100-300′, Kunstl. 5177, 5293, 6648; fruit Sept., Nov., Dec. A tree up to 40′, of Sumatra and Borneo; in Peninsula 4f, 6f, 6g, 8h, 6j, 9l, 9m.

Baccaurea brevipes, *Hook. fil.* At 100′, Scort. 1442, Kunstl. 6232; flr. June, Oct. A tree up to 20′, of Borneo; in Peninsula common.

Baccaurea Griffithii, *Hook. fil.* At 100′, Kunstl. 6617, Anders. 110; fruit March, Sept. A tree up to 60′, endemic and common.

Baccaurea Hookeri, *Gage.* Larut, Kunstl., fide Ridl. A tree up to 70′, endemic, 9m.

Baccaurea Kingii, *Gage.* Larut, Kunstl., fide Ridl. A tree up to 50′, endemic, 2d, 4f, 6k, 9m.

Baccaurea latifolia, *King.* 800-1000′, Kunstl. 6702; flr. Oct. A tree up to 60′, endemic, 9m.

Baccaurea macrophylla, *Müll. Arg.* At Kota, Wray 2406; fruit Aug. A tree up to 80′, of Borneo; in Peninsula 2d, 4f, 5g, 9m.

Baccaurea Maingayi, *Hook. fil.* 1500-2000′, Kunstl. 6837; fruit Nov. A tree up to 60′, endemic, 6k, 9m.

Baccaurea malayana, *King.* Larut, Kunstl., fide Ridl. A tree up to 80′, endemic, 6e, 4f, 5h, and cultivated.

Baccaurea minor, *Hook. fil.* Larut, Kunstl., fide Ridl. A tree up to 30′, endemic, 4d, 4f, 9m.

Baccaurea Motleyana, *Müll. Arg.* At 200′, Hend. 10227; fruit Nov. The Rambai. A tree of about 60′, of Sumatra and Borneo; in Peninsula cultivated.

Baccaurea parviflora, *Müll. Arg.* 800-1500′, Kunstl. 3963; fruit March. A tree up to 15′, of Indo-Malaya; in Peninsula common.

Baccaurea polyneura, *Hook. fil.* At 100′, Kunstl. 6511; flr. Aug. A tree up to 80′, endemic, 6k.

Baccaurea sapida, *Müll. Arg.* 100-2500′, Wray, Kunstl. 3278, 6700, Ridl.; flr. Aug., Oct. A tree up to 50′, of Indo-Malaya; in Peninsula 1b, 0k.

Baccaurea Wallichii, *Hook. fil.* At 500′, Kunstl. 3717; fruit Jan. A tree up to 40′, of Borneo; in Peninsula, 2d, 6f, 5h, 6k, 9l, 9m.

Baccaurea Wrayi, *King.* 2500-3500′, Wray 513, Kunstl. 6353; fruit July. A tree up to 80′, endemic, 1a, 2d, 8h.

Scortechinia Kingii, *Hook. fil.* 800-1000′, Kunstl. 3776; fruit Jan. A tree up to 60′, of Borneo; in Peninsula 6k, 9k.

Elateriospermum Tapos, *Bl.* At Waterloo, Robertson-Glasgow; fruit Dec. A tree up to 100′ or more, of W. Malaysia; in Peninsula 2d, 4f, 5h, 6j, 6k.

Galearia subulata, *Müll. Arg.* Larut, Kunstl., fide Ridl. A shrub up to 18′, endemic, 2d, 4f.

Croton argyratum, *Bl.* 300-500′, Kunstl. 7420; flr. March. A tree up to 40′, of Indo-Malaya to the Philippines; in Peninsula common.

Croton confusum, *Gage.* Larut, Kunstl., fide Ridl. A shrub or tree up to 30′, of Siam; in Peninsula 2d, 6j, 7k, 9l, 9m.

Croton Griffithii, *Hook. fil.* 1000-2000′, Curt. 2057; flr. Sept. A shrub or tree, endemic and common.

Trigonostemon indicus, *Müll. Arg.* At about 1000′, Wray 2633; flr. and fruit Aug. A tree up to 30′, of Siam to Sumatra; in Peninsula common.

Trigonostemon longifolius, *Baill.* 500-800′, Kunstl. 5224: fruit Nov. A shrub up to 12′, of Tenasserim and Sumatra; in Peninsula common.

Agrostistachys borneensis, *Becc.* 500-2500′, Wray 2976, Kunstl. 3523, Curt. 2688, Ridl. 5493; flr. May, June, fruit Oct. A spreading shrub of Borneo; in Peninsula 2c, 2d, 3f, 5h, 0m.

Agrostistachys Gaudichaudii, *Müll. Arg.* Taiping Hills, Kunstl., fide Ridl. A tree up to 60′, endemic and common.

Agrostistachys sessilifolia, *Pax. & Hoffm.* 500-1000′, Wray 2644, Kunstl. 3459; flr. Aug. A small shrub, endemic and common.

Ostodes macrophylla, *Benth.* 1000-1800′, Kunstl. 3916, Curt. 2685; flr. May, fruit Feb. A tree up to 40′, of Java to the Philippines; in Peninsula 5g, 6g, 5h, 6j, 6k, 9m.

Ostodes muricata, *Hook. fil.* Up to 500′, Kunstl. 3415; fruit Sept. A shrub or small tree, endemic, 2d, 3f, 4f.

Claoxylon indicum, *Hassk.* 200-4000′, Wray 2175, Ridl. 2980: flr. Feb., fruit Feb., June. A shrub of Indo-Malaya; in Peninsula common.

Claoxylon Kingii, *Hook. fil.* 2000-2500′, Kunstl., fide Ridl. A shrub up to 6′, endemic and local.

Claoxylon Wallichianum, *Müll. Arg.* At 2000′, Curt. 2056; flr. Sept. A tree up to 20′, endemic, 2d.

Coelodepas longifolium, *Hook. fil.* 500-1000′, Kunstl., fide Ridl. A tree up to 30′, endemic and local.

Alchornea villosa, *Müll. Arg.* At about 1000′, Ridl. 2796. A bush of Sumatra and Java; in Peninsula common.

Epiprinus malayanus, *Griff.* 300-2200′, Wray 2213, Kunstl. 3228, 3543, 3908, 6875, Curt. 1338; flr. Feb., June, Aug., Dec., fruit Nov. A shrub up to 9′, of Sumatra; in Peninsula 2c, 2d, 4e, 5g, 5h, 6j, 6k.

Melanolepis multiglandulosa, *Rchb. fil. & Zoll.* At Kota, Wray, fide Ridl. A tree up to 30′, of Indo-Malaysia and S. China; in Peninsula 6d, 6g, 5h.

Mallotus barbatus, *Müll. Arg.* At 100′, Scort. 277, Kunstl. 1823, Ridl.; flr. April, fruit April, June. A large bush of Indo-Malaya and S. China; in Peninsula 2b, 2d, 4d, 4e, 4f.

Mallotus cochinchinensis, *Lour.* At 3100′, B. & H. 12571; flr. and fruit March. A tree up to 30′, of Indo-Malaya and China; in Peninsula common.

Mallotus floribundus, *Müll. Arg.* At Changkat Serdang, Wray, fide Ridl. A tree up to 40′, of Malaysia; in Peninsula 1a, 2c, 4d, 4f, 6f, 7h, 8h, 6k, 9l.

Mallotus macrostachys, *Müll. Arg.* 400-4000′, Kunstl. 2303, 2496, Curt. 2055, Fox 108; flr. Sept., Oct. A large shrub or small tree of Siam to Borneo; in Peninsula common.

Mallotus repandus, *Müll. Arg.* 100-2000′, Wray 3330, Ridl.; fruit Feb. A climber up to 80′, of Indo-Australia; in Peninsula 2b, 2d, 3f, 5h, 6j.

Mallotus Wrayi, *King.* 300-1000′, Kunstl. 3165, 3456; flr. Aug., fruit Oct. A tree up to 80′, endemic, 3f.

Ptychopyxis costata, *Miq.* Taiping Hills, Ridl. 5499; fruit June. A tree up to 40′, of Sumatra; in Peninsula 5h, 6k, 9m.

Ptychopyxis Kingii, *Ridl.* 500-3000′, Kunstl., fide Ridl. A tree up to 50′, endemic and local.

Macaranga denticulata, *Müll. Arg.* At Taiping, Hend. 10147, 10217, 10372, 10443; flr. Jan., Feb., fruit Nov. A tree up to 40′, of Indo-Malaya; in Peninsula 2b, 6e, 4f, 5g, 5h, 7h.

Macaranga Hosei, *King.* At Taiping, Wray, fide Ridl. A tree up to 40′, of Borneo; in Peninsula 8d, 4f, 6k.

Macaranga Hullettii, *King.* At about 2500′, Ridl., 5497; fruit June. A tree up to 30′, endemic, 3f, 4f, 5g, 4h, 5h, 5j, 6k.

Macaranga Lowii, *King.* Larut, Kunstl., fide Ridl. A tree up to 15′, endemic, 2d, 6e, 5h, 6k, 9m.

Macaranga Maingayi, *Hook. fil.* Larut, Kunstl., fide Ridl. A tree up to 40′, endemic, 6k.

Macaranga puncticulata, *Gage.* At Taiping, Hend. 10044; fruit Jan. A bush or tree of Borneo; in Peninsula 5g, 4h, 9m.

Macaranga Tanarius, *Müll. Arg.* At Kota, Wray, fide Ridl. A small tree of Indo-Australia; in Peninsula common.

Endospermum malaccense, *Müll. Arg.* 100-300′, Wray 2320, 2379, Kunstl. 6392; flr. June, July. A tree up to 80′, endemic and common.

Endospermum perakense, *King.* Larut, Kunstl., fide Ridl. A tree up to 80′, endemic and local.

Pimeleodendron Griffithianum, *Benth.* At 2000′, B. & H. 12827; fruit Feb. A tree up to 40′, endemic, 2d, 4e, 5g, 4h, 5h, 6k, 9m.

Homalanthus populifolius, *Grah.* At Waterloo, 1500′, Curt. 2684; flr. May. A tree up to 20′, of Malaysia to Australia; in Peninsula 2d, 4d, 4f, 6g, 5h, 0j.

Excoecaria sp. 2000-3000′, Kunstl. 2344, fide Hooker. An imperfectly known species.

Sapium indicum, *Willd.* At about 3000′, Ridl.; fruit June. A tree of Indo-Malaya; in Peninsula common on the sea-coasts.

URTICACEAE.

Trema amboinensis, *Bl.* At Taiping, Hend. 10038; flr. Jan. A shrub or small tree of Indo-Australia and China; in Peninsula common.

Gironniera nervosa, *Planch.* Larut, Kunstl., fide Ridl. A tree up to 80′, of Sumatra and Borneo; in Peninsula, Penang to Singapore.

Gironniera parviflora, *Planch.* Taiping Hills, Ridl. (not seen). A tree up to 60′, of the Carimon Is.; in Peninsula common.

Gironniera subaequalis, *Planch.* At 2500′, Ridl. (not seen). A tree up to 80′, of Indo-Malaysia; in Peninsula 2d, 4f, 5g, 5h, 6k, 9m.

Sloetia sideroxylon, *Teys. & Binn.* 500-800′, Wray 2226, 2561, Haniff 13207; fruit March. A tree up to 100′, of W. Malaysia; in Peninsula common.

Ficus acamptophylla, *Miq.* At 3000′, Scort. 310. A climbing epiphyte or tree of Bangka and Borneo; in Peninsula 4d, 3f, 4f, 9l.

Ficus alba, *Reinw.* 200-1500′, Kunstl. 1855, Hend. 10063. A shrub up to 8′, of W. Malaysia; in Peninsula common.

Ficus annulata, *Bl.* Larut, Kunstl., fide Ridl. An epiphyte or tree up to 50′, of Indo-Malaya; in Peninsula common.

Ficus apiocarpa, *Miq.* 100-300′, Wray 1957, Kunstl. 5149. A woody climber of W. Malaysia to the Philippines; in Peninsula common.

Ficus araneosa, *King.* 300-500′, Kunstl. 3565(?). A slender epiphytic climber, endemic, 4f.

Ficus bracteata, *Wall.* At 600′, Barnard 6001. A large shrub or small tree of Java and Borneo; in Peninsula 5h, 6k, 9m.

Ficus callicarpa, *Miq.* Larut, Kunstl., fide Ridl. A woody climber of Tenasserim and W. Malaysia; in Peninsula common.

Ficus celebica, *Bl.,* var. Kunstleri, *Ridl.* Larut, Kunstl., fide Ridl. A climber, the species in Celebes, the Philippines, and N. Guinea; in Peninsula the var. endemic and local.

Ficus chartacea, *Wall.* 3800-4400′, Kunstl. 3217 (var. toruloza), Fox 176, B. & H. 12572. A shrub up to 6′, of Burma; in Peninsula common.

Ficus chrysocarpa, *Reinw.* At about 2500′, Wray 2799. A shrub about 4′, of Indo-Malaya; in Peninsula 3f, 4f, 5g, 6k, 9m.

Ficus consociata, *Bl.* Larut, Kunstl., fide Ridl. An epiphyte of W. Malaysia; in Peninsula, Penang to Singapore.

Ficus copiosa, *Steud.* At about 3000′, Wray 1723, Curt. A shrub or small tree of W. Malaysia except Borneo; in Peninsula 3e only.

Ficus cunia, *Ham.* Taiping Hills, Ridl., (not seen). A bush or small tree of India to Tenasserim; in Peninsula 6d, 6e, 5g, 7g, 5h, 7l.

Ficus cuspidata, *Reinw.*, var. sinuata, *King.* 2500-3000′, Ridl. (not seen). An erect shrub or tree, the species of Malaysia; the var., endemic and local.

Ficus diversifolia, *Bl.* 100-4600′, Wray 649 (var. lutescens), Scort. 308 (var. Kunstleri), H. & N. 2368, Hend. 10239 (var. ovoidea). A bush, epiphytic or not, of Malaysia; in Peninsula common and variable.

Ficus fistulosa, *Reinw.* 2000-3000′, Wray 2937, Scort 274, Kunstl. 6339, H. & N. 2355. A bushy tree of Indo-Malaya and China; in Peninsula 2c, 2d, 4f, 6f, 5g.

Ficus fulva, *Reinw.* 100-500′, Hend. 10040, 10166. A small tree of Indo-Malaya; in Peninsula 5g, 5h.

Ficus glabella, *Bl.* Larut, Kunstl., fide Ridl. A tree up to 60′, of Indo-Malaya; in Peninsula common.

Ficus glandulifera, *Wall.* 100-3000′, Wray 2331, Kunstl. 6326, 8509. A shrub or tree up to 60′, of W. Malaysia; in Peninsula 2d, 9l, 9m.

Ficus globosa, *Bl.* 100-4500′, Ridl. 2970, 14550. A bushy climber of Indo-Malaya; in Peninsula common.

Ficus heterophylla, *Linn.* At Kota, Wray 3335. A creeping shrub, eventually a small tree, of Indo-Malaya; in Peninsula 4f, 6g, 8g, 5h.

Ficus hispida, *Linn.* At 300′, Ridl. (not seen). A shrub or small tree of Indo-Australia and China; in Peninsula common.

Ficus indica, *Linn.* 100-800′, Kunstl. 8495 (var. Gelderi), Hend. 10245. A tree of Indo-Malaya to the Philippines; in Peninsula common.

Ficus laevis, *Bl.* Larut, Kunstl., fide Ridl. An epiphyte or small tree of Indo-Malaya; in Peninsula Penang to Singapore.

Ficus lepicarpa, *Bl.* At 300′, Wray 1983. A small tree of W. Malaysia; in Peninsula 2d, 4f, 5g, 5h, 5j, 6j.

Ficus Lowii, *King.* 1500-2000′, Kunstl. 5412. A liane, endemic, 4d, 4f.

Ficus microstoma, *Wall.* Larut, Kunstl., fide Ridl. A tree up to 60′, of Java; in Peninsula 5h, 6k, 9l, 9m.

Ficus obpyramidata, *Hook. fil.* Larut, Kunstl., fide Ridl. A tree up to 30′, endemic, 5h.

Ficus obscura, *Bl.* At 3500′, H. & N. 2333. A shrub or tree of Indo-Malaya; in Peninsula 4d, 5h, 0k, 9m.

Ficus obtusa, *Hassk.* Larut, Kunstl., fide Ridl. A large epiphytic shrub of W. Malaysia to the Philippines; in Peninsula 2d, 4f, 5h, 6k.

Ficus parietalis, *Bl.* At Kota, Wray 3318. An epiphytic shrub of W. Malaysia; in Peninsula 1a, 2d, 3g, 8g, 6k.

Ficus pisifera, *Wall.* At Taiping, Wray 2401. A climbing epiphyte, becoming a tree, of W. Malaysia to the Philippines; in Peninsula common.

Ficus pisocarpa, *Bl.* Larut, Kunstl., fide Ridl. A small tree of Java; in Peninsula 9m.

Ficus polysyce, *Ridl.* At 300′, Wray 2668. A tree about 50′, of Lower Siam; in Peninsula common.

Ficus pomifera, *Wall.* Larut, Kunstl., fide Ridl. A tree of Indo-Malaya; in Peninsula 4d, 4f, 6f, Johore.

Ficus procera, *Reinw.* At 300′, and Waterloo, Wray 2536, Robertson-Glasgow. A tree of Sumatra and Java; in Peninsula 4d, ?6g, 6k, 9m.

Ficus pruniformis, *Bl.* At 200′, Wray 2137. An epiphyte of W. Malaysia to the Philippines; in Peninsula 4e, 3f, 4f.

Ficus punctata, *Thunb.* 3200-3700′, B. & H. 12720, 12795. A woody climber of W. Malaysia; in Peninsula common.

Ficus pyriformis, *Hook. & Arn.* Taiping Hills, Ridl. A shrub up to 15′, of India to Tenasserim and S. China; in Peninsula 5c, 4d, 6d, 4e, 6e, 4f.

Ficus ramentacea, *Roxb.* 100-1000′, Wray 2333, 4040. A liane of Indo-Malaya; in Peninsula common.

Ficus recurva, *Bl.* 300-600′, Wray 2269, Kunstl. 5490. An epiphytic climber of W. Malaysia to the Philippines; in Peninsula common.

Ficus religiosa, *Linn.* Planted as a roadside tree. A native of India.

Ficus rostrata, *Lamk.* 300-4000′, all collectors. A climbing or erect shrub of Indo-Malaya; in Peninsula common.

Ficus subulata, *Bl.* At Tupai, Wray 2436. A liane of Indo-Malaya and S. China; in Peninsula 6b, 2d, 4e, 3f 4f, 5h, 6k, 7k.

Ficus urophylla, *Wall.* 2000-3500′, Curt. 2060, Ridl., H. & N. 2369. An epiphytic shrub of Indo-Malaya; in Peninsula common.

Ficus variolosa, *Lindl.* At 4700′, B. & H. 12661. A shrub or small tree of Hongkong; in Peninsula 4f.

Ficus villosa, *Bl.* 600-1000′, Kunstl. 4215. A liane of W. Malaysia to the Philippines; in Peninsula 2d, 4f, 5g, 5h, 6k, 9m.

Ficus xylophylla, *Wall.* At 3200′, B & H. 12781. An epiphyte or tree of Sumatra and Borneo; in Peninsula 2d, 4f, 5h, 6k, 9m.

Ficus sp. 3000-4000′, H. & N. 2494, B. & H. 12954. A bush up to 8′. Near F. urophylla, but distinguished by the more numerous and horizontal nerves, and the very long tip to the leaf.

Artocarpus Gomeziana, *Wall.* At 300′, Wray 2073. A tree up to 60′, of Tenasserim and Borneo; in Peninsula, Penang to Singapore.

Artocarpus Kunstleri, *Hook. fil.* Larut, Kunstl., fide Ridl. A tree up to 100′, endemic, 6f, 6j, 6k, 7l, 9m.

Artocarpus Lowii, *Hook. fil.* Larut, Kunstl., fide Ridl. A tree up to 70′, endemic, 5g.

Artocarpus Maingayi, *King.* 300-500′, Kunstl. 6963. A tree up to 40′, endemic, 6g, 5h, 6k, 9m.

Artocarpus rigida, *Bl.* Larut, Kunstl., fide Ridl. A tree up to 100′, of Burma, Sumatra and Java; in Peninsula 4f, 5g, 5h, 6k, 9m.

Conocephalus amoenus, *Hook. fil.* Taiping Hills, Ridl. (not seen). A stout climbing epiphyte of Borneo; in Peninsula common.

Conocephalus ?suaveolens, *Bl.* At 3800′, B. & H. A climber of Indo-Malaya and the Philippines; in Peninsula common.

Conocephalus subtrinervis, *Miq.* Taiping, Wray, fide Ridl. At 2000′, Curt. A slender erect epiphyte of Borneo and ?Sumatra; in Peninsula common.

Prainea scandens, *King.* Larut, Kunstl., fide Ridl. A liane, endemic and local.

Pilea muscosa, *Lindl.* 300-3700′, Ridl. 14546, B. & H. 12916; flr. Feb. A small fleshy herb of S. America, occurring in the Peninsula in shady spots in Penang, Kuala Lumpur, Malacca, Singapore, etc.

Pellionia Duvauana, *N. E. Br.*, var. viridis, *Ridl.* Larut Hills, Kunstl., fide Ridl. A creeping herb of Tenasserim; in Peninsula common.

Pellionia javanica, *Wedd.* Maxwell's Hill, Ridl. (not seen). A creeping herb of Java; in Peninsula 1a, 2d, 4d, 4f.

Elatostemma acuminatum, *Brngn.* Taiping Hills, Curt., fide Ridl. A slender herb of Indo-Malaya; in Peninsula 4f, 5g, 5h, 6k.

Elatostemma molle, *Wedd.* At 4000′, B. & H. 12858. A herb of Himalaya and Assam; in Peninsula 2d, 4d, 6e.

Elatostemma sessile, *Forst.* At 4200′, B. & H. 13022. A herb of Indo-Australia and Africa; in Peninsula 2d, 4d, 4f, 5g, 6g, 5h.

Procris latifolia, *Bl.* Taiping Hills, Ridl. (not seen). A small shrub of Tenasserim to the Pacific; in Peninsula 4d, 4f, 5g, 6g, 5h.

Debregeasia squamata, *Hook. fil.* Taiping Hills, Ridl. (not seen). A shrub up to 15′, endemic, 4e, 4f, 5h.

JUGLANDACEAE.

Engelhardtia Wallichiana, *Lindl.* At about 2500′, Ridl. 5478; fruit June. A tree up to 100′, endemic, 2d, 5g.

Quercus oidocarpa, *Korth.* 500-800′, Kunstl. 3723; fruit Jan. A tree up to 100′ of Burma, Sumatra and Borneo; in Peninsula 2d, 6k.

Pasania Blumeana, *Gamble.* 3500-4000′, Kunstl. 3232, Derry; fruit Aug. A tree up to 50′, of W. Malaysia; in Peninsula 3e only.

Pasania Cantleyana, *Gamble.* 300-1000′, Kunstl. 5112, 5396, 5475, 5554; flr. Nov., fruit Jan., Feb. A tree up to 80′, endemic and common.

Pasania conocarpa, *Schky.* 300-700′, B. & H. 13178, 13224; flr. March. A tree about 80′, of W. Malaysia; in Peninsula 4f, 5g, 4h, 9m.

Pasania costata, *Gamble.* 500-1000′, Kunstl. 7277; fruit Feb. A tree up to 80′, of Sumatra and Java; in Peninsula 4f, 6j, 9k.

Pasania Curtisii, *Gamble.* Up to 1000′, Kunstl., fide Gamble. A tree about 40′, endemic, 2d, 5g, 5h.

Pasania cyclophora, *Gamble.* 2000-3000′, Kunstl. 6888; flr. Nov. A tree up to 100′, of Borneo; in Peninsula 2d, 4f, 5g.

Pasania cyrtorhyncha, *Gamble.* 500-800′, Kunstl. 4898; flr. Sept. A tree up to 50′, of Sumatra, Borneo and the Philippines; in Peninsula Taiping to Singapore.

Pasania discocarpa, *Gamble.* 800--1500′, Kunstl. 5482; flr. Jan. A tree up to 130′, of Sumatra and Borneo; in Peninsula 2d, 5h, 6j.

Pasania Eichleri, *Gamble.* 300-1500′, Kunstl. 3875, 4043, 4092, 5570; flr. Sept., fruit Feb., March. A tree up to 100′, of Sumatra; in Peninsula 6g, 5h.

Pasania encleisocarpa, *Gamble.* 300-1000′, Kunstl. 5143, 5594, 5689; fruit Nov. A tree up to 60′, of Sumatra; in Peninsula 2d, 3f, 5g, 5h, 6k, 9m.

Pasania Ewyckii, *Gamble,* var. latifolia, *King.* Up to 800′, Kunstl. 8532, fide Gamble. A tree up to 40′, the species of Sumatra and Borneo; in Peninsula the species at 2d, 4f, 7g, 9m, the var. at 9m.

Pasania grandifrons, *Gamble.* 300-4000′, Kunstl. 3766, 4870, 5365, 6544, 7259; flr. Sept., fruit Feb. A tree up to 100′, endemic, 2d, 4e.

Pasania Kunstleri, *Gamble.* 100-1000′, Kunstl. 2482, 5128, 5436; flr. Oct., Nov., fruit Jan. A tree up to 30′, of Borneo; in Peninsula 1b, 3f, 4f, 5h.

Pasania lappacea, *Oerst.* 300-500′, Kunstl. 3919; flr. Oct. A tree up to 80′, of India and Burma; in Peninsula 3e only.

Pasania lamponga, *Gamble.* 100-500′, Kunstl. 6490, 6578, 6910, 7278; flr. Sept., fruit Feb., Dec. A tree up to 80′, of Sumatra and Borneo to Papua; in Peninsula common.

The Gardens' Bulletin

STRAITS SETTLEMENTS

This issue completes Volume III of the Gardens' Bulletin. It is hoped to proceed with the publication of Volume IV at an early date. Subscriptions for the new volume are now due, and should be addressed to the Director, Botanic Gardens, Singapore; for particulars, see back cover of this issue.

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PLATES.

Facing p. 1 Branched coconut palm at Bachok, Kelantan.

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„ (b) Yams from Tahiti.

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„ 245 Summit of Gunong Belumut, with shoulder-high scrub containing Matonia.

„ 247 At the junction of the Matonia-scrub with the mossy forest, on the western ridge of Gunong Belumut.

„ .. 251 Typical mossy forest, near the summit of Gunong Belumut, upon the south face.

„ 258 Tubers of three varieties of Dioscorea pentaphylla.

„ 289 Tubers of a Stenomeris.

Pasania lucida, *Gamble.* 300-4700′, Wray 2217, Kunstl. 3999, 5086, 5279, 5351, 6500, 6914, B. & H. 12587; fruit March, Aug., Dec. A tree of about 80′, endemic and common.

Pasania omalokos, *Schky.* 2500-3000′, Kunstl. 6901; fruit Nov. A tree up to 100′, of Sumatra; in Peninsula 4f, 6j, 6k, 9m.

Pasania Rassa, *Gamble.* 4500-4600′, Kunstl. 6957; fruit Dec. A bush or tree up to 60′, of W. Malaysia; in Peninsula 2d, 6e, 5g, 6g, 7k, 9m.

Pasania Scortechinii, *Schzy.* At about 3500′, Kunstl. 2188, fide Gamble. A tree up to 100′, endemic and local.

Pasania spicata, *Oerst.* var. gracilipes, *DC.* Larut, Kunstl., fide Ridl. A tree up to 80′, of Indo-Malaya; in Peninsula common and variable.

Pasania sundaica, *Oerst.* 100-2500′, Wray 2563, 2699, 3103, Kunstl. 2232, 3866, 3944, 4870, 6583, 7013, 7371, Fox 185; flr. July-Sept., fruit Aug., Oct., Dec. A tree up to 80′, of W. Malaysia to the Philippines; in Peninsula common.

Pasania Wallichiana, *Gamble.* 1000-4000′, Kunstl. 5795, Curt., Ridl.; fruit Sept. A tree up to 60′, endemic and common.

Pasania Wrayi, *Gamble.* At Kota, Wray 2854. A tree, endemic, 4f.

Castanopsis costata, *A. DC.* Up to 4600′, Wray, Kunstl. 2909, 3651, 6975, fide Gamble. A tree up to 50′, of W. Malaysia; in Peninsula 3e only.

Castanopsis megacarpa, *Gamble.* 300-800′, Kunstl. 6469, 6522, Haniff 13134; flr. Aug., fruit March. A tree up to 80′, endemic and common.

Castanopsis nephelioides, *King.* 100-800′, Kunstl. 5542, 6518; flr. Feb. A tree up to 60′, endemic, 4f, 6k, 9m.

Castanopsis Ridleyi, *Gamble.* At 100′, Kunstl. 6831; fruit Nov. A tree up to 80′, endemic, 6k.

Castanopsis sumatrana, *A. DC.* 100--1000′, Wray 2168, Kunstl. 3788, 5382, 5510; flr. Feb., Dec., fruit Jan. June. A tree up to 80′, of Indo-Malaya to the Philippines; in Peninsula Penang to Malacca.

Castanopsis Wallichii, *King.* At 4000′, Fox 108; fruit Oct. A tree of about 80′, endemic and common.

SALICINACEAE.

Salix tetrasperma, *Roxb.* In open low ground near water, Kunstl. 1987, fide Gamble. A small tree up to 30′, of S. E. Asia; in Peninsula 2d, 4d, 6d, 4e, 5g, 5h, 8h, 6k, perhaps in most places planted.

HYDROCHARIDACEAE.

Ottelia alismoides, *Pers.* At 100′, Kunstl. 4073, 5530; flr. and fruit Feb., March. A submerged freshwater herb of Indo-Australia and Africa; in Peninsula 1b, 6b, 2d, 4f, 5h, 6k.

ORCHIDACEAE.

Microstylis acutangula, *Hook. fil.* 3000-4000′, Ridl.; flr. March. A terrestrial herb, endemic, 4f, 5h, 6j, 9l.

Microstylis congesta, *Rchb. fil. Malaxis latifolia, Sm.* At about 3000′, Ridl. A terrestrial herb of Indo-Australia and China; in Peninsula common.

Microstylis micrantha, *Hook. fil. Malaxis micrantha, Ktze.* 3000-4000′, Ridl., Hervey; flr. June. A creeping herb of Borneo; in Peninsula 6k, 7l, 8l, 9m.

Microstylis perakensis, *Ridl.* 200-3000′, Curt., Ridl.; flr. Sept., fruit June. A small terrestrial herb of ?Java; in Peninsula 6d, 4e, 4f.

Oberonia brunnescens, *Ridl.* Larut Hills, Ridl. An epiphyte, endemic, and local. The only sheet of this in Herb. Singap. is labelled "Perak, loc. incert.".

Oberonia insectifera, *Hook. fil.* At 3500′, Kunstl. 2793, fide Ridl. A small epiphyte, endemic, 6e.

Oberonia Prainiana, *King.* Taiping Hills, Ridl.; flr. Dec. A small epiphyte of Himalaya and Siam; in Peninsula 2d, 6j.

Oberonia rosea, *Hook. fil.* Larut Hills, Kunstl. 2664, fide Ridl. An epiphyte, endemic, 2d, 4f.

Liparis atrosanguinea, *Ridl.* At 3500′, Curt., flr. Dec. A terrestrial herb, endemic and local.

Liparis comosa, *Ridl.* At 2000′, Curt., Anders. 94; flr. Sept., fruit March, Sept. A small epiphyte, endemic, 4d, 4f, 5h.

Liparis compressa, *Lindl.* At 4000′, Curt. 2069, Ridl.; flr. March, Sept. An epiphyte of W. Malaysia and the Philippines; in Peninsula 4f, 5g.

Liparis disticha, *Lindl.* Larut, Kunstl. 4986, fide Ridl. An epiphyte of Indo-Malaysia and the Mascarene Is.; in Peninsula common.

Liparis elegans, *Lindl.* 300-3800′, Kunstl. 7283, Ridl, B. & H.; flr. and fruit Feb. An epiphyte or rock plant of Borneo; in Peninsula common.

Liparis ferruginea, *Lindl.* At 100′, Kunstl. 7282; flr. Feb. A terrestrial herb of Indo-China and Borneo; in Peninsula 4f, 6k, 9m.

Liparis furcata, *Ridl.* At 4000′, Ridl.; fruit March, Dec. A small terrestrial herb, endemic and local.

Liparis lacerata, *Ridl.* At 3000′, Ridl.; flr. and fruit June. An epiphyte of Tenasserim and Borneo; in Peninsula 1b, 3f.

Liparis latifolia, *Lindl.* 3000-4500′, Ridl. An epiphyte of Java and Borneo; in Peninsula 5h.

Liparis longipes, *Lindl.* Taiping Hills, Derry; flr. Sept. An epiphyte of Indo-Malaya and China; in Peninsula 2d, 4f.

Liparis Maingayi, *Ridl.* 3000-3300′, Ridl., Derry, Anders. 42, B. & H. 12704; flr. March, June, Oct., Dec. A herb on wet rocks, endemic, 2c, 2d, 4f, 5g, 7k.

Liparis parvula, *Ridl.* 3000-3900′, Fox, Ridl., B. & H. 12721; flr. March. A small terrestrial herb, endemic and local.

Liparis transtillata, *Ridl.* At Maxwell's Hill, Ridl. A terrestrial herb, endemic and local.

Platyclinis gracilis, *Hook. fil.* 3500-4500′, Curt., Ridl., Derry; flr. Sept., fruit March. An epiphyte of Java; in Peninsula 6e, 4f, 5h.

Platyclinis Kingii, *Hook. fil. Dendrochilum Kingii, Pftz.* Larut Hills, Curt. 2756; flr. March. An epiphyte of Borneo; in Peninsula 4e, 6e.

Platyclinis sarawakensis, *Ridl.* Taiping Hills, Curt., fide Ridl. An epiphyte of Borneo; in Peninsula 3e only.

Dendrobium aegle, *Ridl.* 3000-4000′, Ridl, Derry, H. & N. 2304, B. & H. 12963; flr. Feb., March, June, Sept. An epiphyte, endemic, 7l.

Dendrobium atro-rubens, *Ridl.* At 4100′, H. & N. 2346; flr. Feb. An epiphyte of Sumatra; in Peninsula 2c, 6e, 5g, 6g.

Dendrobium aureum, *Lindl.* var. Philippinensis. Larut Hills, Stephens, fide Ridl. An epiphyte of Indo-Malay to the Philippines; in Peninsula 3e only.

Dendrobium clavator, *Ridl.* At Taiping, Ridl. An epiphyte, endemic, 9l.

Dendrobium crocatum, *Hook. fil.* Larut, Kunstl., fide Ridl. An epiphyte, endemic, 6e, 5h, 5j, 9m.

Dendrobium crumenatum, *Sw.* The Pigeon Orchid. An epiphyte of Indo-Malaya and China; in Peninsula very common on roadside trees etc.

Dendrobium Derryi, *Ridl.* Taiping Hills, Derry; flr. Jan. An epiphyte, endemic and local.

Dendrobium flabellum, *Rchb. fil.* 300-1800′, Wray 3154, Kunstl. 6897; flr. Nov. A large epiphyte of Indo-Malaya; in Peninsula 4b, 6j, 7l, 9m.

Dendrobium Foxii, *Ridl.* At about 4000′, Derry, B. & H. 12726; flr. March, Oct. An epiphyte, endemic and local.

Dendrobium gemellum, *Lindl.* At Taiping (Resident's Garden), Ridl. An epiphyte of Siam to Borneo; in Peninsula 1b, 4b, 6e, 6k, 9m.

Dendrobium geminatum, *Hook. fil.* 3000-4500′, Curt. 2067, Fox, Derry, Stephens; flr. Sept., Dec. An epiphyte of Java; in Peninsula 2c, 6e, 4f, 5g.

Dendrobium Kelsalli, *Ridl.* At about 3000′, Ridl. An epiphyte, endemic, 2c, 6e, 6g, 7k, 0k.

Dendrobium leonis, *Rchb. fil.* Anders. 132; flr. March. An epiphyte of Indo-China and Borneo; in Peninsula 2d, 6f, 7g, 8g, 5h, 5j, 6k, 7l, 9m.

Dendrobium longipes, *Hook. fil.* At about 4500′, Ridl., Derry; fruit June. An epiphyte, endemic, 4e, 6e, 4f, 5g, 5h.

Dendrobium macropodum, *Hook. fil.* At 5000′, Ridl. (not seen). An epiphyte of Sumatra and ?Java; in Peninsula 6e, 6g.

Dendrobium pachyglossum, *Par. & Rchb. fil.* 2500-3000′, Ridl., Derry; flr. Oct. An epiphyte of Tenasserim; in Peninsula 1b, 2c, 6e.

Dendrobium pumilum, *Roxb.* At Taiping Curt.; flr. Oct. An epiphyte of Burma and Borneo; in Peninsula common.

Dendrobium roseatum, *Ridl.* At 4000′, Curt. 2061; flr. Sept. An epiphyte, endemic, 5h.

Dendrobium rosellum, *Ridl.* At Taiping, Ridl. An epiphyte of Borneo; in Peninsula 9l.

Dendrobium sinuatum, *Lindl.* 100-4000′, Curt., Ridl. An epiphyte of Borneo; in Peninsula 2d, 6e, 6g, 6k, 7l, 9l, 9m.

Dendrobium superbum, *Rchb. fil.* Larut Hills, Scort., Stephens, fide Ridl. An epiphyte of Borneo and the Philippines; in Peninsula 1b.

Dendrobium teres, *Lindl.* At about 3000′, Curt.; flr. June. An epiphyte of Borneo; in Peninsula 2d, 6j, 0k, 9l, 9m.

Dendrobium tetrodon, *Rchb. fil.* At Taiping, Hobson, fide Ridl. An epiphyte of Java; in Peninsula 4d, 4e.

Dendrobium tubiferum, *Hook. fil.* G. Hijau, Murton fide Ridl. An epiphyte of Java and Borneo; in Peninsula 4d, 8g, 6j, 7l, 9m.

Dendrobium uniflorum, *Griff.* 3000-4000′ (fide Ridl.), Curt., Ridl.; flr. Feb. An epiphyte of Borneo and the Philippines; in Peninsula 6e, 7k.

Dendrobium virescens, *Ridl.* At Taiping, Curt., fide Ridl. An epiphyte, endemic, 5c.

Bulbophyllum apodum, *Hook. fil.* Top of Batu Kurau, Scort., fide Ridl. An epiphyte of Borneo; in Peninsula 5j, 6j, 6k, 8l, 9m.

Bulbophyllum capitatum, *Lindl.* At about 4500′, Curt.; flr. Sept. A tufted epiphyte of Java and Borneo; in Peninsula 2d, 6e, 4f, 5g, 6g, 5h, 7l.

Bulbophyllum catenarium, *Ridl.* At about 3000′, Curt., Ridl.; flr. June, Oct. An epiphyte of Borneo; in Peninsula 6g, 5h, 9m.

Bulbophyllum citrinum, *Ridl.* At Taiping, Ridl. An epiphyte of W. Malaysia; in Peninsula 5k, 7k, Johore, 9m.

Bulbophyllum cleistogamum, *Ridl.* At Waterloo, 2000′, Curt.; flr. Oct. An epiphyte of Rhio and Borneo; in Peninsula 3e only.

Bulbophyllum galbinum, *Ridl.* 3000-4000′, Curt., Ridl. 2888, B. & H. 13199; flr. Feb.-April, June, Dec. A creeping epiphyte, endemic, 6e, 5g, 5h.

Bulbophyllum gigas, *Ridl.* At about 3000′, Ridl. 5193; flr. June. An epiphyte, endemic, 4f.

Bulbophyllum leptosepalum, *Hook. fil.* At about 3000′, Ridl.; flr. June. An epiphyte, endemic, 2d.

Bulbophyllum linearifolium, *King.* At 3800′, B. & H. 12562; flr. March. An epiphyte, endemic, 2c, 4f.

Bulbophyllum Lobbii, *Lindl.* At Maxwell's Hill, Stephens; flr. Sept. An epiphyte of Tenasserim to Borneo; in Peninsula 3e, 4e, 8l.

Bulbophyllum Makoyanum, *Ridl.*, var. Brienanum, *Ridl.* At Taiping, Curt., Ridl. An epiphyte of Borneo and the Philippines; in Peninsula the species at 9m, the var. at 4f, 9l.

Bulbophyllum Medusae, *Rchb. fil.* Waterfall Hill, Wray, fide Ridl. An epiphyte of Siam and Borneo; in Peninsula common.

Bulbophyllum modestum, *Hook. fil.* At 3000′, Curt., Ridl.; flr. June, Dec. A small epiphyte, endemic, 2c, 4f, 9m.

Bulbophyllum oblanceolatum, *King.* At 4000′, Ridl.; flr. March. An epiphyte, endemic, 4f, 5g, 6g.

Bulbophyllum ochranthum, *Ridl.* 3000-4000′, Curt., fide Ridl. An epiphyte, endemic and local.

Bulbophyllum perakense, *Ridl.* At Waterloo, Elphinstone, fide Ridl. An epiphyte, endemic and local.

Bulbophyllum pileatum, *Lindl.* Waterfall Hill, Wray, fide Ridl. An epiphyte of Sumatra; in Peninsula 2d, 9l, 9m.

Bulbophyllum psittacoides, *Ridl.* At 300′, Curt.; flr. Dec. An epiphyte of Siam; in Peninsula 1b, 2d, 3f, 8g, 5j, 6j, 6k, 7l, 9m.

Bulbophyllum pulchellum, *Ridl.* At Taiping Ridl. An epiphyte of Lower Siam and Rhio; in Peninsula 1b, 2d, 6d, 5h, 9l, 9m.

Bulbophyllum selangorense, *Ridl.* Taiping Hills, Long, fide Ridl. An epiphyte, endemic, 2c, 5h.

Bulbophyllum vaginatum, *Rchb. fil.* At Taiping, Hend. 10205; flr. Aug. An epiphyte of Java and Borneo; in Peninsula common.

Bulbophyllum variabile, *Ridl.* Taiping Hills, Ridl.; flr. April. An epiphyte, endemic, 4f.

Bulbophyllum Wrayi, *Hook. fil.* At 2500′, Derry; flr. Sept. An epiphyte, endemic, 4f, ?6d.

Dendrochilum album, *Ridl.* 3000-4600′, Kunstl. 3279, Ridl.; flr. June, Aug. A creeping epiphyte of Tenasserim and Lower Siam; in Peninsula 4e, 5g.

Eria aeridostachya, *Rchb. fil.* 3000-4000′, Ridl. (not seen.) An epiphyte of Malaysia; in Peninsula 3d, 6k, 9l, 9m.

Eria aporina, *Hook. fil.* At 2000′, Ridl.; flr. Dec. A small epiphyte, endemic, 2c, 4f, 5g.

Eria bidens, *Ridl.* 2000-4500′, Ridl. 2883, Anders. 46; flr. March. An epiphyte, endemic, 4f, 5g.

Eria brunea, *Ridl.* At about 2500′, Ridl., Long; flr. June. An epiphyte, endemic, 6g, 5h, 9m.

Eria densa, *Ridl.* 4500-4700′, Derry, H. & N. 2472, B. & H.; flr. Feb., Sept. An epiphyte of Borneo; in Peninsula 2c, 5g.

Eria ferox, *Bl.* 300-4200′, Kunstl. 3360, Curt. 1325, Ridl. 5192, H. & N. 2364, Anders. 30; flr. Feb., March, June, Sept., Dec. An epiphyte or rock plant of W. Malaysia; in Peninsula 2c, 6e, 4f, 5g.

Eria floribunda, *Lindl.* 3000-4700′, Curt., Ridl., H. & N. 2464, Anders. 43, B. & H. 12597 (var.), 12654; flr. Feb., March, Dec., fruit March. A small epiphyte of Malaysia; in Peninsula 1b, 2c, 6e, 5g, 5h, 5j, 9l, 9m.

Eria larutensis, *Ridl.* Taiping Hills, Curt. and Derry 3712, fide Ridl. An epiphyte, endemic and local.

Eria longifolia, *Hook. fil.* 2000-4500′, Ridl.; flr. June, fruit Feb. An epiphyte of Sumatra and Borneo; in Peninsula 6e, 4f, 5g, 6g.

Eria major, *Ridl.* 2500-4500′, Kunstl. 3311, Ridl., Derry, Hervey; flr. June, Sept. An epiphyte of Borneo and the Philippines; in Peninsula 4b, 4f, 5g, 6g.

Eria monticola, *Hook. fil.* Larut Hills, Curt.; flr. Aug. An epiphyte, endemic, 2c, 6e, 5g, 5h, 6j, 7k, 0k.

Eria pilifera, *Ridl.* 2500-3700′, Ridl. 2887, B. & H. 13003; flr. March. An epiphyte of Sumatra; in Peninsula 5g.

Eria poculata, *Ridl.* At about 4500′, Ridl. 2884; flr. Feb. An epiphyte, endemic, 2c, 6e, 5g, 7k, 9k.

Eria ramulosa, *Ridl.* Taiping Hills, Long; flr. March. A creeping epiphyte, endemic and local.

Eria teretifolia, *Griff.* At about 4000′, Curt., Ridl.; flr. March, Sept. A small epiphyte of Borneo; in Peninsula 2c, 2d, 6e, 4f, 5g, 6k, 7k.

Eria vestita, *Lindl.* At 4700′, B. & H. 12630; flr March. An epiphyte of Borneo; in Peninsula common.

Phreatia listrophora, *Ridl.* 2500-4000′, Ridl.; flr. June. A small epiphyte, endemic, 1b, 6e, 5g.

Phreatia minutiflora, *Lindl.* At about 3500′, Ridl. A small epiphyte, widely Malaysian; in Peninsula 5h, Johore, 9m.

Phreatia myosurus, *Lindl. Phreatia densiflora, Lindl.* 3000-4500′, Kunstl. 6923, Ridl., Anders. 4; flr. Feb., March, Dec. A small epiphyte of W. Malaysia and the Philippines; in Peninsula 5h.

Agrostophyllum bicuspidatum, *J. J. Sm., Podochilus callosa, Schl.* 3000-4500′, Ridl., Anders. 44, B. & H. 12555; flr. March, June. An epiphyte of Tenasserim and W. Malaysia; in Peninsula common.

Agrostophyllum majus, *Hook. fil.* At 2000′, Ridl.; flr. Feb. A tufted epiphyte of Sumatra and Borneo; in Peninsula 2d, 4f, 8h, 9l, 9m.

Ceratostylis cryptantha, *Ridl.* At about 2500′, Ridl.; flr. and fruit June. A small epiphyte, endemic, 2d, 5g.

Ceratostylis pendula, *Hook. fil.* 300-500′, Kunstl. 3847; flr. Feb. A small epiphyte of Borneo to the Philippines; in Peninsula 2d, 5h, 8h, 7l.

Ceratostylis puncticulata, *Ridl.* At about 4500′, Ridl.; flr. June. A small epiphyte, endemic and local.

Ceratostylis subulata, *Bl.* 4000-4500′, Curt., Fox 138, Ridl., B. & H. 12752; flr. March, Sept., Oct. A small epiphyte of Java; in Peninsula common.

Chrysoglossum villosum, *Bl.* Taiping Hills, Scort., fide Ridl. A terrestrial herb of Java; in Peninsula 3e only.

Collabium nebulosum, *Bl.* 4200-4500′, Haniff 9089, Derry, B. & H. 12757; flr. March, Oct. An epiphyte of Java; in Peninsula 4f.

Diglyphosa latifolia, *Bl.* Taiping Hills, Anders. 178; flr. March. A terrestrial herb of Java; in Peninsula 3e only.

Plocoglottis javanica, *Bl.* 3000-4000′, Curt., Ridl.; flr. June, Sept. A terrestrial herb of Java and Borneo; in Peninsula common.

Tainia atropurpurea, *Ridl.* At 2000′, Curt. 2308; flr. May. A terrestrial herb of Himalaya; in Peninsula 2d, 4f.

Ascotainia penangiana, *Ridl.* At about 4000′, Curt.; flr. Dec. A terrestrial herb of Java and Amboina; in Peninsula 2d.

Nephelaphyllum pulchrum, *Bl.* ? Larut Hills, Curt. A terrestrial herb of Indo-Malaya; in Peninsula 4e, 6e, 3f, 4f, 6j, 6k, 7k, 9m. Curtis' specimen is without locality, but Ridley in the "Materials" quotes a specimen from the Larut Hills without mentioning the collector.

Spathoglottis aurea, *Lindl.* 2000-4700′, Ridl., B. & H. A terrestrial herb of W. Malaysia to the Philippines; in Peninsula common in the hills.

Spathoglottis plicata, *Bl.* 100-3000′, Kunstl. 3268, Ridl., Hend. 10023, 10142, B. & H.; flr. Jan., Feb., Aug. A tall herb, widely Malaysian; in Peninsula common.

Phaius callosus, *Lindl.* 2500-4000′, Wray 2986, Kunstl 6413, Curt., Ridl. 5191; flr. June, Aug., Sept. A large terrestrial herb of Sumatra (a var.) and Java; in Peninsula 4e, 5g.

Phaius pallidus, *Ridl.* 3000-4000′, Ridl., Curt. 2064; flr. June, Sept. A terrestrial herb of Sumatra; in Peninsula 6e, 6f, 5g, 5h.

Calanthe albolutea, *Ridl.* At about 4000′, Ridl, Derry; flr. Oct. A large terrestrial herb, endemic, 2c, 6e, 4f, 6g.

Calanthe angustifolia, *Lindl.* At 4700′, Kunstl. 5054, Curt. 2066; flr. Sept. Oct. A terrestrial herb of Sumatra and Java; in Peninsula 2c, 4f, 5g, 6g.

Calanthe Ceciliae, *Rchb. fil.* Larut Hills, Anders 130; flr. March. A terrestrial herb of Java; in Peninsula 4e, 6e, 4f, 6g, 5h, 5j, 6k.

Calanthe curculigoides, *Lindl.* 2500-4000′, Wray 2809, Curt. 2065; flr. Sept. A terrestrial herb of Sumatra and Java; in Peninsula 1b, 2d, 4f, ?k, 8l, 9l, 9m.

Calanthe Foerstermanni, *Rchb. fil.* 3800-4000′, Curt, Ridl., B. & H. 13006; flr. March, June, Sept. A terrestrial herb of Assam; in Peninsula 3e only.

Calanthe veratrifolia, *R. Br.* 4000-4500′, Ridl., Hervey; flr. June. A terrestrial herb of Indo-Australia; in Peninsula 4f, 6g, 4h, 5h, 6j, 9l, 8m, 9m.

Arundina revoluta, *Hook. fil.* At 300′, Wray 1979, Ridl. 2882; flr. Feb., fruit Feb., June. A tall woody herb, a var. only in Borneo; in Peninsula 3e only.

Dilochia Wallichii, *Lindl.* At 4000′, Curt., Derry; flr. Jan., Oct. An epiphyte of W. Malaysia; in Peninsula 6j, 9m.

Coelogyne asperata, *Lindl.* 300-1000′, Kunstl. 7287; flr. Feb. A large epiphyte of Sumatra, Borneo and N. Guinea; in Peninsula 4d.

Coelogyne carnea, *Hook. fil.* 4000-4500′, Hose 41, Anders. 57; flr. March, Aug. An epiphyte, endemic, 3d, 4e, 6e, 4f, 5g, 6g, 5h.

Coelogyne Cumingii, *Lindl.* Larut Hills, Derry. Waterloo, Elphinstone; flr. Aug. A rock plant or epiphyte, endemic, 6e, 6f, 7k, ?0k, 9m.

Coelogyne Dayana, *Rchb. fil.* 4000-4700′, Kunstl. 6492, Curt., Ridl., Derry, Anders. 58, B. & H. 12596; flr. March, June, Aug. An epiphyte or rock plant of Sumatra and Borneo; in Peninsula 2d, 3d, 6e, 4f, 6g, 5h, 7k.

Coelogyne Kingii, *Hook. fil.* Larut Hills, Kunstl., Derry, fide Ridl. An epiphyte, endemic, 5j.

Coelogyne longibractata, *Hook. fil.* At 4700′, Derry, B. & H. 12628; flr. Feb., March. An epiphyte, endemic, 3d, 6e, 5g, 5h, 5j, 9l.

Coelogyne pallens, *Ridl.* 2000-4000′, Curt., Ridl., H. & N. 2324, B. & H. 12708; flr. Feb., March, Dec. An epiphyte, endemic, 2c, 4f.

Coelogyne perakensis, *Rolfe.* 3000-4500′, Curt. 2068, Ridl., Derry, Anders. 53; flr. March, Aug., Sept. An epiphyte, endemic, 4f, 5g, 6g, 9m.

Coelogyne pusilla, *Ridl.* At about 4500′, Curt. 2063, Ridl.; flr. Sept. An epiphyte of Java; in Peninsula 3e only.

Coelogyne quadrangularis, *Ridl.* At about 4500′, Ridl.; flr. July. An epiphyte? of Borneo; in Peninsula 3e only.

Coelogyne Rochusseni, *De Vr.* At 100′, Kunstl. 6794; flr. Nov. An epiphyte of W. Malaysia; in Peninsula common.

Coelogyne speciosa, *Lindl.* 3000-4500′, Ridl. 5198; flr. March, June. An epiphyte of Java and Borneo; in Peninsula 2d, 4e, 6e, 4f, 5g, 5h, 6j, 9l, 9m.

Pholidota parviflora, *Hook. fil.* 2500-4700′, Ridl., Derry, H. & N. 3245, B. & H. 12957; flr. Feb., March, Dec. An epiphyte, endemic, 3d, 4e, 6e, 4f.

Claderia viridiflora, *Hook. fil.* At 2000′, Ridl., B. & H. 12831; flr. Feb. A terrestrial herb of Sumatra and Borneo; in Peninsula 2d, 6e, 3f, 4f, 5j, 6k, 8k, 7l, 9l, 9m.

Cymbidium acutum, *Ridl.* Taiping Hills, Ridl. (not seen). At Waterloo, Elphinstone; flr. Aug. An epiphyte of Himalaya and Assam; in Peninsula 3e only.

Dipodium pictum, *Rchb. fil.* At about 2000′, Curt.; flr. June. A climber on trees, of W. Malaysia; in Peninsula 6e, 4f, 5g, 6k, 7k, 9m.

Grammatophyllum stapeliiflorum, *J. J. Sm., Cymbidium Huttoni, Hook. fil.* At Taiping, Derry, Stephens. An epiphyte of Sumatra, Java and Celebes; in Peninsula 3e only.

Bromheadia brevifolia, *Ridl.* Larut Hills, Ridl. (not seen). A herb of Borneo; in Peninsula 3e only.

Bromheadia palustris, *Lindl.* 100-300′, Ridl., Hend. 10141; flr. Feb. A tall herb of Indo-Malaya; in Peninsula 2c, 5c, 2d, 6k, 7k, 7l, 9l, 9m.

Adenoncos virens, *Bl.* At about 3000′, Ridl.; fruit June. A small epiphyte of W. Malaysia; in Peninsula 4e, 5h, 5j, 9m.

Doritis Wightii, *Benth.* Taiping Hills, Stephens. An epiphyte of India to Lower Siam; in Peninsula 1b, 4d, 5j, 0j, 6k.

Renanthera elongata, *Lindl.* At 300′, Wray, fide Ridl. A large herb of Java and Borneo; in Peninsula 2d, 3f, 4f, 6k, 7l, 9m.

Trichoglottis scaphigera, *Ridl.* At Waterloo, Curt., fide Ridl. A tall herb, endemic, 4a, 2d.

Saccolabium bigibbum, *Hook. fil.* At about 4500′, Ridl. An epiphyte of Burma; in Peninsula 4e, 6e, 6g, 5h.

Saccolabium ionosmum, *Ridl.* At about 3000′, Ridl.; flr. June. An epiphyte, endemic and local.

Saccolabium perpusillum, *Hook. fil.* At Taiping, in orchards, Curt.; flr. and fruit Oct. A small epiphyte, endemic, 5h, 6k, 9m.

Saccolabium secundum, *Ridl.* At 4000′, Hervey. A large epiphyte of Indo-Malaya; in Peninsula 1b, 2d, 5j, 6k, 7l.

Microsaccus javensis, *Bl.* At 3800′, B. & H. 12563; fruit March. A small epiphyte of Burma, Siam and Java; in Peninsula 4h, 5h, 9m.

Taeniophyllum serrula, *Hook. fil.* Larut, Kunstl., fide Ridl. An epiphyte endemic, 1a, 2d, 6d, 4e, 8f, 8g, 5h, 8h, 9l, 9m.

Ascochilus hirtulus, *Ridl.* Larut, Kunstl., fide Ridl. A small epiphyte, endemic, 1b, 2d, 6d, 6g, 5h, 5j, 6k.

Aerides odoratum, *Lour.* At 200′, Hend. 10150; flr. Feb. An epiphyte of Indo-Malaya and China; in Peninsula 1b, 2c, 2d, 5h, 6k, 0k.

Thrixspermum arachnites, *Rchb. fil.* At Taiping, Bishop Hose; flr. Feb. An epiphyte of W. Malaysia; in Peninsula 2d, 3f, 4f, 5h, 7l, 9l, 9m.

Thrixspermum lilacinum, *Rchb. fil.* At Taiping, Ridl. At 4000′, Ridl. (var. montanum), (not seen). A terrestrial herb of Java and Borneo; in Peninsula common in grassy swamps, the var. at 4f.

Thrixspermum pardale, *Schltr. Dendrocolla pardalis, Ridl.* Larut, Kunstl., fide Ridl. An epiphyte of Borneo; in Peninsula 4d, 6d, 4f, 6f, 7g, 8g.

Thrixspermum pauciflorum, *Ridl.* At 3000′, Scort., fide Ridl. An epiphyte?, endemic and local.

Acriopsis javanica, *Reinwdt.* 2000-4500′, Ridl., Anders. 56; flr. March. An epiphyte, widely Malaysian; in Peninsula common.

Thecostele maculosa, *Ridl.* At Taiping, Ridl. An epiphyte of Borneo; in Peninsula 2c, 6e, 6k.

Thecostele secunda, *Ridl.* At Taiping, Ridl. An epiphyte of Borneo; in Peninsula 4f.

Thecostele Zollingeri, *Rchb. fil.* At Waterloo, Curt. 2308, 2309; flr. May. An epiphyte of Tenasserim and Borneo; in Peninsula 2d.

Appendicula anceps, *Bl. Podochilus anceps, Schl.* 100-500′, Kunstl. 2609; flr. and fruit Dec. An epiphyte of Java to the Philippines; in Peninsula common.

Appendicula cornuta, *Bl. Podochilus cornuta, Schl.* Taiping Hills, Ridl. An epiphyte of Indo-Malaya and China; in Peninsula common.

Appendicula lancifolia, *Hook. fil. Podochilus lancifolia, Schl.* 3800-4400′, Fox 154, Ridl. 2886, B. & H. 12564; flr. Oct., fruit March. An epiphyte, endemic, 4b, 4f, 5h.

Appendicula muricata, *Teys. and Binn. Podochilus muricata. Schl.* At 3200′, B. & H. 12701. An epiphyte, endemic, 2c, 4f, 5g, 5h.

Appendicula torta, *Bl. Podochilus torta, Schl.* At about 2500′, Ridl.; flr. June. An epiphyte of Java and Borneo; in Peninsula 6c, 5h, 9l.

Appendicula undulata, *Bl. Podochilus unciferus, Hook. fil.* 2400-4000′, Curt. 2062, Fox 121, Ridl., Derry, Anders. 145, H. & N. 2470, B. & H. 12979; flr. Feb., March, June, Sept., Oct. An epiphyte of W. Malaysia to the Philippines; in Peninsula 4e, 6e, 4f, 6g, 5h.

Podochilus tenuis, *Lindl.* 100-300′, Curt., Ridl.; flr. Oct. A moss-like epiphyte of W. Malaysia; in Peninsula 2c, 2d, 4d, 4e, 6e, 4f, 5g.

Thelasis macrobulbon, *Ridl.* At about 2500′, Ridl.; flr. June. An epiphyte, endemic, 4f, 5h.

Oxyanthera elata, *Hook. fil.* At Taiping, Ridl. A stemless epiphyte of W. Malaysia to the Philippines; in Peninsula 2c, 2d, 4f, 5g, 6g, 8g, 5h, 8h, 9m.

Vanilla Griffithii, *Rchb. fil.* Taiping Hill, Stephens. At 3500′, B. & H.; flr. Sept. A climbing shrub of Siam to the Carimon Is.; in Peninsula common.

Galeola pterosperma, *Schltr. Galeola Hydra, Rchb. fil.* 200-4000′, Curt. 2070, Ridl. 2889; flr. March, Sept., Oct. A leafless saprophyte of Indo-Malaya; in Peninsula common.

Aplostellis flabelliformis, *Ridl.* At Taiping, Wray, fide Ridl. A tuberous herb of Indo-Malaya; in Peninsula 1a, 2b, 6f.

Aphyllorchis pallida, *Bl.* At 4300′, Fox 142, Ridl.; flr. Feb., Oct. A leafless saprophyte of Java and Borneo; in Peninsula 2d, 3d, 4d, 4e, 6e, 4f, 9m.

Corymbis longiflora, *Hook. fil.* 300-4500′, Kunstl. 6988, Curt., Ridl.; flr. June, Dec., fruit March. A terrestrial herb of Indo-Australia and Africa; in Peninsula common.

Tropidia curculigoides, *Lindl.* At about 3000′, Ridl. 5195, 11416; flr. Dec. A terrestrial herb of India and Borneo; in Peninsula common.

Physurus latifolius, *Bl.* At about 3000′, Curt.; flr. June. A terrestrial herb of Java; in Peninsula 3e only.

Cystorchis variegata, *Bl.* At Batu Kurau, Curt.; flr. Oct. A small terrestrial herb of Java and Borneo; in Peninsula common.

Anoectochilus albolineatus, *Par. and Rchb. fil.* At Taiping, Derry, fide Ridl. A small terrestrial herb of India and Burma; in Peninsula 5h.

Anoectochilus ?calcaratus, *Ridl.* At 4000′, Anders. 69; flr. March. (Determination doubtful). A terrestrial herb, endemic and local.

Anoetochilus geniculatus, *Ridl.* Maxwell's Hill, Wray, fide Ridl. A small herb, endemic, 6k, 7k, 9l, 9m.

Anoectochilus macranthus, *Ridl.* 2000-3000′, Curt., Ridl.; flr. Dec. A small terrestrial herb, endemic, 9k.

Anoectochilus pectinatus, *Ridl.* 2500-4700′, Curt., Ridl. 5195, B. & H. 12758, 12895; flr. Feb., March, June. A terrestrial herb, endemic and local.

Anoectochilus Reinwardtii, *Bl.* 2500-3000′, Ridl.; flr. June. A small terrestrial herb of Sumatra and Java; in Peinsula 2c, ?2d, 4f, 5g.

Goodyera gracilis, *Hook. fil.* 4000-4700′, Ridl., Derry, B. & H. 12641; flr. March, June, Oct., fruit March. A small terrestrial herb, endemic and local, a var. only in 5h.

Hylophila lanceolata, *Hook. fil.* At 3600′, H. & N. 2336; flr. and fruit March. A terrestrial herb of Sumatra and Java; in Peninsula 4f.

Hylophila mollis, *Lindl.* Taiping Hills, Ridl.; flr. Aug. A terrestrial herb of Sumatra; in Peninsula 6k, 9m.

Lepidogyne longifolia, *Bl.* At 2500′, B. & H. 13210; flr. March. A large terrestrial herb of Sumatra, Java and the Philippines; in Peninsula 2d, 8m.

Cryptostylis arachnites, *Hassk.* At about 3000′, Ridl.; flr. June. A terrestrial herb of Indo-Malaya to the Philippines; in Peninsula common.

Habenaria gigas, *Hook. fil.* At about 3000′, Curt.; flr. June. A tall herb, endemic, 4f, 5h.

SCITAMINEAE.

Globba albiflora, *Ridl.* At Taiping, Ridl.; flr. Aug. A herb up to 3′, endemic, 2d, 8d, 4e.

Globba aurantiaca, *Miq.* 500-4000′, Ridl., Hervey, B. & H.; flr. March. A herb of Sumatra and Borneo; in Peninsula common.

Globba brachycarpa, *Baker.* 2000-4000′, Kunstl. 2414, Curt. 2703, Ridl. 2956; flr. March, Sept., Oct. A slender herb, endemic and local.

Globba cernua, *Baker.* 500-4000′, Ridl. 14429, Hervey, Anders. 86, 136, Hend. 10097, 10118, B. & H. 12853; flr. Jan., March, fruit Aug. A herb, endemic and common.

Globba leucantha, *Miq.* 300-1500′, Kunstl. 2291, Hend. 10456; flr. Sept. A herb of Sumatra; in Peninsula 3f, 4f, 8l, 9l, 9m.

Globba panicoides, *Miq.* 100-800′, Hend. 10006, 10176, 10190, 10445; flr. Jan., June. A herb up to 2′, of Sumatra and Borneo; in Peninsula common on the west.

Globba pendula, *Roxb.* 2000-4000′, Ridl. 2957, 14428, B. & H. 12773; flr. March, Aug., June. A herb of Tenasserim and Lower Siam; in Peninsula 2c, 2d, 4d, 4e, 6e, 6f, 5g.

Globba uliginosa, *Miq.* At Maxwell's Hill, Ridl.; flr. March. A herb up to 2′, of Sumatra; in Peninsula common.

Globba variabilis, *Ridl.* 300-1000′, Kunstl. 2051; flr. July. A herb up to 2′, of Lingga and Borneo; in Peninsula common.

Globba Wallichii, *Baker.* At 4000′, Fox. 136, Anders. 144; flr. March, Oct. A herb up to 2′, endemic, 2d.

Hedychium longicornutum, *Baker.* Larut Hills, Ridl.; flr. June. An epiphyte of Sumatra; in Peninsula common.

Camptandra parvula, *Ridl.* 400-4500′, all collectors; flr. Jan.-March, Sept. A small herb, endemic and common.

Gastrochilus albo-sanguinea, *Ridl.* Larut Hills, Woolridge, fide Ridl. A small herb, endemic, 1b.

Gastrochilus minor, *Baker.* Larut, Kunstl., fide Ridl. A small herb, endemic, 4d, 4f.

Curcuma Kunstleri, *Baker.* 100-1500′, Kunstl. 2542, Curt. 2719; flr. May, Nov. A herb, endemic, 2d, 3d, 4d, 4e, 3f, 4f.

Conamomum citrinum, *Ridl.* 300-4500′, Ridl. 2959, 14447, Anders. 40; flr. March, fruit Aug. A large herb of Lower Siam; in Peninsula 4e, 4f.

Conamomum utriculosum, *Ridl.* 2000-4000′, Curt. 2714, Ridl. 5190, Anders. 139, B. & H. 12955; flr. March, May, June. A large herb, endemic, 6e, 4f.

Costus globosus, *Bl.* Up to about 2500′, Ridl., Curt.; flr. May, June. A herbaceous plant up to 8′, of W. Malaysia; in Peninsula common.

Costus Kingii, *Baker.* 300-1500′, Kunstl. 2104, Curt.; flr. May, July. A herbaceous plant up to 6′, endemic, 2d, 4d.

Costus Kunstleri, *King.* 500-1000′, Kunstl. 2307; flr. July. A tall herb, endemic and local.

Costus speciosus, *Sm.*, var. argyrophyllus, *Wall.* At Taiping, Scort. 436; fruit April. A herbaceous plant up to 10′, widely Malaysian, the var. in Pegu; in Peninsula common.

Zingiber aromaticum, *Valeton.* At 300′, Kunstl. 2163; flr. Aug. A herb of Java; in Peninsula common, cultivated and in waste ground.

Zingiber chrysostachys, *Ridl.* 100-4000′, Curt. 2716, Ridl. 5199, Hervey; flr. May, June. A herb up 2′, endemic, 4d.

Zingiber gracile, *Jack.* 3000-3600′, Ridl. (var. elatior), B. & H. 12712; flr. June. A herb, endemic and common, the var. in 2d.

Zingiber Kunstleri, *King.* 2000-4300′, Ridl. 11449, 11962, B. & H. 12765; flr. Feb., March, Dec. A large herb, endemic and local.

Zingiber spectabile, *Griff.* At 300′, Kunstl. 3205; flr. Aug. A herb up to 7′, of Sumatra; in Peninsula common.

Amomum lappaceum, *Ridl.* 2000-3000′, Ridl.; fruit Feb., June. A herb up to 6′, endemic, 4f, 5h, 0k.

Amomum perakense, *Ridl.* At 2500′, Ridl.; flr. June, fruit Dec. A herb, endemic and local.

Amomum uliginosum, *Koen.* 100-4000′, Kunstl. 1839, Ridl.; flr. March, June. A herb up to 5′, of Siam and Borneo; in Peninsula common.

Amomum xanthophlebium, *Baker.* 500-1000′, Kunstl. 1957; flr. June. A herb up to 6′, endemic, common.

Hornstedtia albomarginata, *Ridl.* 2000-3800′, Ridl., B. & H. 12981; flr. March, June, Dec. A herbaceous plant up to 10′, endemic, 2d, 6d, 3f, 4f, 4h 5h, 6j.

Hornstedtia fulgens, *Ridl.* Larut Hills, Ridl. (not seen). A herbaceous plant up to 15′, endemic and local.

Hornstedtia grandis, *Ridl.* 3000-4000′, Ridl. 11450, B. & H. 12651; flr. March, June, Dec. A herbaceous plant up to 15′, endemic, 4f, 5g.

Hornstedtia imperialis, *Ridl.* 100-300′, Kunstl. 3075, Ridl., Hend. 10139, 10159, 10312; flr. Feb., April, June, Aug. A herbaceous plant up to 15′, of Sumatra and Java; in Peninsula cultivated.

Hornstedtia macrochilus, *Ridl.* 500-3000′, Kunstl. 1897, Curt.; flr. June, Sept. A herbaceous plant up to 12′, endemic, 6d, 4f, 6k, 7l, 9l.

Hornstedtia megalochilus, *Ridl.* 100-2000′, Kunstl. 2933, Ridl.; flr. April. A herbaceous plant up to 15′, of Lower Siam; in Peninsula common.

Hornstedtia metriochilus, *Ridl.* 2000-3000′, Curt., Ridl., Anders. 137; flr. March, May, June. A herbaceous plant up to 12′, endemic, 2d, 6d, 4e, 5h, 6k, 7l, 8l, 9l.

Hornstedtia scyphus, *Retz.* At 4000′, Curt. 2072; flr. Sept. A herbaceous plant up to 10′, of Sumatra and Borneo; in Peninsula 4h, 5h, 7l, 9m.

Hornstedtia triorgyale, *Ridl.* 200-300′, Kunstl. 2105; flr. July. A herbaceous plant up to 20′, endemic, 6d, 6g, 5h.

Elettariopsis latiflora, *Ridl.* 800-1500′, Kunstl. 2886; flr. March. A creeping herb, endemic, 2c, 4f, 5h, 6k, 8k, 9m.

Geostachys decurvata, *Ridl.* 3000-4000′, Kunstl. 6310, Ridl. 5189, Anders. 60; flr. June, July, fruit March, July. A large tufted plant, endemic and local.

Alpinia javanica, *Bl.* At 100′, Kunstl. 2296, at Waterloo, Ridl. 2954; flr. Sept., fruit March. A herb up to 6′, of Sumatra and Java; in Peninsula common.

Alpinia macrostephanus, *Ridl.* 500-1000′, Kunstl. 1905; flr. June. A herb up to 8′, endemic and local.

Alpinia mutica, *Roxb.* At 100′, Kunstl. 2581; flr. Nov. A herb up to 6′, of Borneo; in Peninsula 2d, 0k.

Alpinia petiolata, *Baker.* 2000-4000′, Kunstl. 6357, Curt., Ridl.; flr. June, July, Sept., Dec. A herb up to 3′, endemic, 6e, 4f, 5g, 6k.

Alpinia Rafflesiana, *Wall.* 100-4000′, Curt. 2074, 2985, Ridl., Anders. 143, Hend. 10007, 10078, 10096, 10455; flr. Jan., March, Sept., Oct. A herb up to 4′, endemic and common.

Alpinia scabra, *Benth.* 2000-3000′, Kunstl. 2818, Curt. 2722, Anders. 141, Hend. 10117, B. & H. 12692; flr. Jan., March, May, Dec. A herb up to 6′, of Java; in Peninsula common.

Donax grandis, *Ridl.* 500-4000′, Curt. 2071, Hend. 10417; flr. May, fruit Oct. A shrub up to 20′, of Tenasserim to Borneo; in Peninsula common.

Phrynium hirtum, *Ridl.* At 4200′, Ridl. 11452, B. & H. 12900; flr. Dec., fruit March. A stemless herb, endemic, common.

Phrynium malaccense, *Ridl.* At Maxwell's Hill, Ridl.; flr. March. A large stemless herb of Lower Siam; in Peninsula common.

Musa malaccensis, *Ridl.* Up to about 4700′, Ridl. 2949 B. & H.; flr. March, Dec. A banana up to 10′, endemic and common.

Musa truncata, *Ridl.* Taiping Hills, Ridl. (not seen). A big banana, endemic, 4f, 5h.

Musa violascens, *Ridl.* At 500′, Haniff 10561; flr. May. A banana up to 10′, of Borneo; in Peninsula 4d, 4e, 6e, 4f, 6f, 5g, 5h, 6j.

AMARYLLIDACEAE.

Curculigo latifolia, *Dryand.* 500-4600′, Kunstl. 2521, 6405, B. & H. 12642; flr. March, July, Nov. A stemless herb of Indo-Malaya; in Peninsula common.

Curculigo megacarpa, *Ridl.* 2000-3800′, Ridl. 11407, B. & H. 12991; flr. Feb., Dec. A large tufted plant, endemic and local.

Curculigo recurvata, *Dryand.* At 3000′, Ridl. 11421; flr. and fruit Dec. A tuberous herb of Indo-Australia and China; in Peninsula 4f, 9m.

BURMANNIACEAE.

Burmannia coelestis, *Don.* At Taiping, Hend. 10325; flr. Aug. A small herb of Indo-Australia and China; in Peninsula common.

Burmannia Disticha, *Linn.* At Taiping, Hose 44; flr. Dec. A small herb of Indo-Australia and China; in Peninsula 2c, 6e, 7k.

Burmannia longifolia, *Becc.* At 4750′, Kunstl. 5039, Ridl.; flr. June, fruit Oct. An erect herb of Malaysia; in Peninsula 3d, 4e, 6e, 4f, 5g, 6g, 5h.

Thismia arachnites, *Ridl.* At 2000′, Ridl. (not seen). A small saprophyte, endemic and local.

Bagnisia crocea, *Becc.*, var. brunnea, *Ridl.* About 4700′, Ridl.; flr. Feb. A very small saprophyte, the species of Borneo; in Peninsula 3e only.

TACCACEAE.

Tacca cristata, *Jack.* 200-3000′, Wray 2657, Kunstl. 2174, Hend. 10460, 10480; flr. Feb., Aug. A tuberous herb of Burma; in Peninsula common.

DIOSCOREACEAE.

Dioscorea bulbifera, *Linn.* 100-200′, Wray 2669, Kunstl. 3526; flr. Aug. A climbing shrub of Africa, Indo-Australia and China; in Peninsula common.

Dioscorea deflexa, *Hook. fil.* 300-1000′, Kunstl. 3858, 3972, 6568; flr. March, Sept. A wide climber of Tenasserim to Java; in Peninsula 2d, 8d, 4e, 7j.

Dioscorea glabra, *Roxb.* At 100′, Wray 569 (var. grisea), Kunstl. 2370 (var. grisea), 2186. A climber of India to Siam; in Peninsula 1b, 2c, 2d.

Dioscorea hispida, *Dennst.*, var. reticulata, *Hook.* At 300′, and Bukit Gantang, Wray 1894, Kunstl 4190; flr. May. A spiny climber of Indo-Australia; in Peninsula common.

Dioscorea laurifolia, *Wall.* 100-4700′, Kunstl. 5549, H. & N. 2308, 2309, 2316, 2318, 2329, 2343, 2388, 2393, 2394, B. & H. 12862; flr. and fruit Feb. A slender unarmed climber, endemic and common.

Dioscorea orbiculata, *Hook. fil.* At 300′, Wray 3251, Kunstl. 3421, 5068, B. & H. 12804. A slender climber of Sumatra and Borneo; in Peninsula common.

Dioscorea piscatorum, *Prain and Burkill.* At 200′, Hend. 10059. A thorny climber of Sumatra; in Peninsula 4e, 4f, 6f, 6g, 0j.

Dioscorea polyclades, *Hook. fil.* 300-800′, Kunstl. 2980. A climbing shrub of W. Malaysia; in Peninsula 5e, 4f, 5g, 5h, 5j, 6j, 8k, 9m.

Dioscorea pyrifolia, *Kunth.* 300-3600′, Kunstl. 5125, H. & N. 2337, 2399. A climbing shrub of W. Malaysia; in Peninsula common.

Dioscorea Scortechinii, *Prain and Burkill.* 3000-3900′, Scort., H. & N. 2307, B. & H. 12724, 12973; flr. Feb., March. A climbing shrub of Tonkin and Sumatra; in Peninsula 6k, 8l, 9l.

Dioscorea stenomeriflora, *Prain and Burkill.* 100-2000′, Kunstl. 4160, 5152, 6693, 6746; flr. April, Nov. A climber up to 30′, endemic, 5h, 9m.

LILIACEAE.

Protolirion paradoxum, *Ridl. and Groom.* Up to 4000′, Wray, Ridl. A small saprophyte, endemic, 2c, 4e, 6e, 4f, 5g.

Peliosanthes albida, *Baker.* 2000-4500′, Curt., Ridl. 14448, Hend. 10470, B. & H. 12703; flr. Feb., March, Sept. A herb of Sumatra and Borneo; in Peninsula 2d, 5h, 6k.

Peliosanthes grandiflora, *Ridl.* Taiping Hills, Ridl. A herb, endemic and local.

Peliosanthes violacea, *Wall.* Taiping Hills, Ridl., Anders. 121; fruit March. A herb of Himalaya to Siam; in Peninsula common.

Peliosanthes viridis, *Ridl.* At 2000′, Ridl.; fruit Feb. A bushy herb of Sumatra; in Peninsula 6k, 7l, 9l, 9m.

Ophiopogon malayanum, *Ridl.* 2000-3000′, Curt., H. & N. 2497; flr. Feb., fruit Dec. A herb of Borneo; in Peninsula 1b, 2d.

Dianella ensifolia, *Red.* 200-4750′, Wray 1978, 4282, Hend. 10228, B. & H.; fruit Nov. A herb up to 6′, of Indo-Australia and the Mascarene Is.; in Peninsula common.

Dracaena conferta, *Ridl.* At 2500′, Ridl. 11408, B. & H. 13034; flr. Dec., fruit March. A shrub up to 10′, of Lower Siam; in Peninsula 2d, 3d, ?6k.

Dracaena elliptica, *Thunb.* 3000-4700′, Ridl., B. & H. 12592, 12665; flr. March, June, fruit March. A shrub up to 6′, of Indo-Malaya; in Peninsula common.

Dracaena granulata, *Hook. fil.* At 200′, Kunstl. 6808, fide Ridl. A tree up to 60′, of ?Borneo; in Peninsula 9l, 9m.

Dracaena Maingayi, *Hook. fil.* Larut, Kunstl. 3564, fide Ridl. A tree up to 40′, of Malaysia; in Peninsula 2d, 8g, 5h, 6k, 7l, 9m.

Dracaena Porteri, *Bak.* Larut, Ridl. (not seen). A small shrub of Siam; in Peninsula 2d, 6d, 6e, 5h, 6j, 6k, 7k, 8l, 9m.

Dracaena robusta, *Ridl.* Taiping Hills, Ridl. (not seen). A shrub up to 9′, endemic, 6d, 4e, 5g.

Dracaena umbratica, *Ridl.* At 500′, Hend. 10113; flr. Jan. A shrub up to 3′, endemic, common.

Smilax aspericaulis, *Wall.* 1800-2000′, Kunstl. 2924, Ridl. 11403; flr. April, Dec. A climbing shrub of India to Java, except Sumatra; in Peninsula 5h.

Smilax barbata, *Wall.* Up to 2000′, Ridl. (not seen). A thorny climber of Bangka; in Peninsula 5h, 6k, 9m.

Smilax Blumei, *A. DC.* At 2000′, Ridl. (not seen). A thorny climber of Java; in Peninsula 4f, 6k.

Smilax calophylla, *Wall.* 100-3700′, Kunstl. 1961, 4108, B. & H. 12714; fruit March, April, June. A slender erect shrub of Sumatra; in Peninsula common.

Smilax Helferi, *A. DC.* 100-500′, Kunstl. 3365; flr. Sept. A woody climber of Tenasserim; in Peninsula common.

Smilax Kingii, *Hook. fil.* 300-800′, Wray 2063, Kunstl. 4171, Hend. 10008; fruit April. A thorny climber, endemic, 6j.

Smilax laevis, *Wall.* 300-4700′, Kunstl. 4140, Fox 139, Ridl. 2957, 11389, B. & H. 12864; flr. Dec., fruit Feb., April, Oct. A slender climber of China and Borneo; in Peninsula 2c, 2d, 4f, 5g, 5h, 7k, 9k.

Smilax leucophylla, *Bl.* Larut Hills, Kunstl. 3669, fide Ridl. A woody climber of Indo-China and Malaya; in Peninsula 2d, 3f, 8g, 5h, 0k, 9m.

Smilax megacarpa, *A. DC.* 300-1000′, Kunstl. 4177, 5084; flr. Oct., fruit April. A thorny climber of India, Tonkin and Java; in Peninsula 2d, 3f, 6k, 9m.

Smilax myosotiflora, *A. DC.* Larut, Kunstl. 2748, fide Ridl. A slender climber of Lower Siam and Java; in Peninsula common.

COMMELINACEAE.

Pollia sorzogonensis, *Endl.* At 2000′, Curt.; fruit May. A tall herb of Indo-Australia and China; in Peninsula common.

Pollia thyrsiflora, *Endl.* At 300′, and Waterloo, Curt., Ridl., Hend. 10047; flr. May, fruit Jan., March. A herb of Malaysia; in Peninsula 1b, 4e, 6e, 6f, 5g, 5h, 0j.

Commelina nudiflora, *Linn.* 100-4000′, Wray, Hervey, B. & H. 12780; flr. March. A creeping herb, pantropic; in Peninsula common.

Aneilema conspicuum, *Kunth.* Taiping Hill, Anders. 115; flr. and fruit March. A herb of Indo-Malaya; in Peninsula 2d, 4d, 6d, 6f, 6k.

Aneilema nudiflorum, *Br.* Taiping, Wray, fide Ridl. A creeping herb of S. E. Asia; in Peninsula common.

Floscopa scandens, *Lour.* At Taiping, Ridl., Hend. 10371; flr. Jan. A creeping herb of Indo-Australia and China; in Peninsula common near streams.

Forrestia gracilis, *Ridl.* 300-400′, Hend. 10451; flr. Feb. A creeping herb, endemic and common.

Forrestia marginata, *Hassk.* Taiping Hills, Ridl.; flr. Feb., fruit Feb., Dec. A creeping herb of W. Malaysia; in Peninsula common.

Forrestia mollis, *Hassk.* At about 3000′, Ridl. 2950; flr. March. A creeping herb of Sumatra and Java; in Peninsula 4d, 6e, 7k, 9k, 8l, 9l.

Forrestia monosperma, *Clarke.* 1500-2500′, Curt., Ridl. A creeping herb, endemic, 4d, 6e, 4f, 5h.

ALISMACEAE.

Limnocharis emarginata, *Humb. and Bonpl.* At 200′, Wray 1764. An aquatic herb of S. America. An escape from cultivation.

FLAGELLARIACEAE.

Flagellaria indica, *Linn.* At 4750′, B. & H. A climbing shrub of the Old World tropics; in Peninsula common, usually near the sea.

Joinvillea malayana, *Ridl.* At 4000′, Ridl. 11914, Hose 60; fruit Feb. A tall reed-like plant of Borneo; in Peninsula 4e, 4f, 5g.

Susum malayanum, *Hook. fil.* 200-3800′, Wray 2128, Curt., Ridl. 11430, Hend. 10459; flr. June, Oct., fruit Feb., June, Dec. A large herb of Java and Borneo; in Peninsula common.

PALMAE.

Areca pumila, *Bl.* Larut Hills, Ridl. 11429 (not seen). A palm up to 15′, of Siam and Java; in Peninsula 1b, 2d, 4e, 5g, 6j, 9m.

Pinanga malaiana, *Scheff.* At about 2000′, Ridl. A palm up to 12′, of Sumatra and Borneo; in Peninsula common.

Pinanga paradoxa, *Scheff.* Up to 3700′, Curt., Ridl., B. & H. 12715; fruit March, Oct. A palm up to 12′, endemic and common.

Pinanga polymorpha, *Becc.* 4400-4700′, Ridl., B. & H. 12875; fruit Feb., June, Dec. A palm up to 3′, endemic, 4f, 5g, 5h.

Pinanga Scortechinii, *Becc.* 2000-4700′, Curt. 2080, Fox, Ridl., Anders. 163, B. & H. 12627; flr. Sept., Dec., fruit Feb., March, Sept., Oct. A palm up to 15′, of Lower Siam; in Peninsula common.

Nenga macrocarpa, *Scort.* 3000-4500′, Ridl., B. & H. 12790; flr. Feb., June, Dec. A palm up to 18′, endemic and common.

Nenga Wendlandiana, *Scheff.* Taiping Hills, Ridl.; flr. Dec. A palm up to 15′, of Sumatra; in Peninsula Taiping to Singapore.

Oncosperma horrida, *Scheff.* At 3200′, B. & H. A palm up to 65′, of Borneo; in Peninsula 2d, 6e, 4f, 6g, 6k, 9m.

Iguanura bicornis, *Becc.* 3500-4000′, Kunstl. 6375; flr. and fruit July. A palm up to 8′, endemic, doubtfully from 4f.

Iguanura ferruginea, *Ridl.* 2000-4000′, Fox 162, Ridl. 11405; flr. Oct., Dec. A short-stemmed palm, endemic, 4f.

Iguanura geonomaeformis, *Mart.*, var. malaccensis, *Ridl.* Up to 2500′, Ridl. 11404, Robertson-Glasgow; flr. Dec. A palm up to 3′, endemic and common.

Iguanura polymorpha, *Becc.* 3000-4000′, Curt. 2078, Ridl. 3157, Anders. 173, Forest Dept. C.F. 29, B. & H. 12715; flr. and fruit Feb., March, Sept. A palm up to 7′, endemic, 6d, 4e, 4f, 6g.

Iguanura Wallichiana, *Hook. fil.* Up to 4000′, Fox, Anders. 170; flr. March. A palm up to 12′, endemic, 2d, 3d, 6e, 4f, 6f, 7k.

Arenga saccharifera *Labill.* At 3900′, B. & H. A palm up to 30′, of Indo-Malaya; in Peninsula common.

Arenga Westerhouti, *Griff.* Taiping Hills, Ridl. (not seen). A palm up to 30′, endemic, 2d, 4e, 6e, 4f, 6k.

Didymosperma Hookeriana, *Becc.* At Waterloo, 1500′, Curt.; fruit May. A dwarf palm of Lower Siam; in Peninsula 1a, 2b, 4d, 6e, 4f, 6g.

Caryota obtusa, *Griff.* Common at 3400′, Ridl. 11401, B. & H. A palm up to 60′, endemic, 4f, 5g, 6k, 9l.

Licuala longipes, *Griff.* At Maxwell's Hill, Ridl.; fruit June. A stemless palm, endemic, Taiping to Singapore.

Licuala malayana, *Becc.* 4000-4500′, Fox 163, Ridl., B. & H. 12589; flr. Oct., Dec., fruit March. A palm up to 7′, endemic, 6e, 4f, 6g, 7h.

Licuala modesta, *Becc.* 2000-4500′, Fox, Ridl., Hervey, B. & H. 12551, 12873, 12948; flr. Feb., March, June, Oct. A palm up to 10′, endemic and local.

Licuala pusilla, *Becc.* At about 1500′, Ridl. 11406, 14727; flr. Feb., Aug., Dec. A dwarf palm, endemic, 6e, 4f, 4g, 5g.

Zalacca affinis, *Griff.* Larut, Kunstl., fide Ridl. A short-stemmed palm, endemic, 2d, 3f, 6k, 8l, 9m.

Zalacca edulis, *Bl.* At 3200′, B. & H. A Javanese palm, cultivated here.

Eugeissonia tristis, *Griff.* Up to about 2500′, common. A tufted palm of Borneo; in Peninsula common on the West.

Daemonorops aciculatus, *Ridl.* 3000-4700′, Ridl., Anders. 176; flr. June, fruit March. A large rattan, endemic and local.

Daemonorops calicarpus, *Mart.* Larut, Kunstl., fide Ridl. A tufted palm, endemic and common.

Daemonorops didymophyllus, *Becc.* At 3200′, Ridl., B. & H. 12681; flr. March, fruit Feb. A rattan up to 40′ long, of Borneo: in Peninsula 2d, 4f, 7l, 9l, 9m.

Daemonorops elongatus, *Bl.* 3500-3800′, Fox, Ridl., B. & H. 12646, 12716; fruit Feb., March. A rattan of Borneo; in Peninsula common.

Daemonorops geniculatus, *Mart.* 2000-3500′, Kunstl. 2735, Ridl.; flr. Feb. A rattan about 20′, endemic and common.

Daemonorops hygrophilus, *Mart.* At 4300′, B. & H. 12766; flr. March. A tall stout rattan, endemic, 5h, 6k.

Daemonorops hystrix, *Mart.* Larut, Kunstl. 5142, fide Ridl. A rattan up to 30′, of W. Malaysia; in Peninsula common.

Daemonorops leptopus, *Mart.* Larut Hills, Ridl.; flr. Dec. A stout stemmed rattan, endemic, 4f, 5h, 6k, 9l, 9m.

Daemonorops monticolus, *Mart.* 3800-4700′, B. & H. 12763, 12994; fruit March. A tufted rattan of Borneo; in Peninsula 2d, 0k, 8l.

Daemonorops periacanthus, *Miq.* At about 2000′, Ridl. 11409; flr. Dec. A rattan up to 40′, of Sumatra and Borneo; in Peninsula common.

Ceratolobus laevigatus, *Becc.* 2000-2900′, Wray 2919, Ridl. 3488, 11436, H. & N. 2377, B. & H. 12696; fruit Feb., March, Dec. A climbing palm, endemic, 3f, 4f, 5g, 5h, 0j.

Calamus ciliaris, *Bl.* 2500-3700′, Ridl., B. & H. 12771; fruit March, Dec. A rattan up to 20′, of W. Malaysia; in Peninsula 6e, 8l, 9l.

Calamus Curtisii, *Ridl.* At Maxwell's Hill, Ridl.; flr. June. A stout stemmed rattan, endemic, 4f, 5g, 5h.

Calamus densiflorus, *Becc.* At Taiping, Kunstl. 3527, 8434, fide Ridl. A rattan up to 15′, endemic, 8f, 5h, 9m.

Calamus Diepenhorstii, *Miq.* Taiping Hills, Ridl. 11411, 11412; fruit Dec. A rattan up to 30′, of Sumatra and Borneo; in Peninsula 2d, 4d, 6e, 3f, 4f, 6j.

Calamus intumescens, *Becc.* At 2500′, Ridl. (not seen). A long stemmed rattan, endemic, 5g, 7l, 9m.

Calamus longispatha, *Ridl.* At Taiping, Wray 2392, 3017, fide Ridl. A stout rattan, endemic, 4f, 5g.

Calamus luridus, *Becc.* 3500-4000′, Ridl. 11987; fruit Feb. A rattan up to 20′, of Borneo; in Peninsula 4f, 5g, 5h, 6j, 7k, 9l, 9m.

Calamus ornatus, *Bl.* Larut, Kunstl., fide Ridl. A rattan up to 80′, of W. Malaysia and the Philippines; in Peninsula 6j, 6k, 7l, 9l, 9m.

Calamus pencillatus, *Roxb.* 200-4700′, Curt., Anders. 168, B. & H. 12590, 13219, Haniff 13257; flr. May, Sept., fruit March. A rattan up to 60′, of Java and Borneo; in Peninsula common.

Calamus ramosissimus, *Griff.* 1000-3000′, Curt., Ridl. 11986, H. & N. 2499, B. & H. 12688; flr. Feb., March, Sept., Dec. A rattan up to 30′, endemic, 2c, 6e, 4f, 6f, 6j.

Calamus rhomboideus, *Bl.* At about 4000′, Ridl. 11410; flr. Dec. A rattan up to 40′, of W. Malaysia; in Peninsula 6k.

Calamus rugosus, *Becc.* 3000-4000′, Curt., Ridl. 11314, 11315; flr. Feb., May, fruit Feb., Dec. A rattan up to 20′, endemic and local.

Calamus viridispinus, *Becc.* 4000-4700′, Ridl. 3494, 5203, 11413, 11985, Anders. 21, 167, H. & N. 2321, B. & H. 12767, 12901; flr. Feb., March, June, Dec. A rattan up to 25′, endemic and local.

Korthalsia echinometra, Becc. At 3200′, Ridl.; B. & H. 12787; flr. March. A rattan up to 100′, of Borneo; in Peninsula 5j, 6j, 6k, 9m.

Korthalsia ferox, *Becc.* Up to 4500′, Scort., Kunstl., fide Ridl. A rattan up to 30′, of Borneo; in Peninsula 2d.

Korthalsia scaphigera, *Mart.* 200-500′, Kunstl. 3722; flr. Jan. A rattan up to 60′, of Sumatra, Borneo and the Philippines; in Peninsula 6k, 9k, 9m.

Korthalsia tenuissima, *Becc.* At 300′, Kunstl. 4057, fide Ridl. A slender rattan up to 100′, endemic and local.

Plectocomia ?Griffithii, *Becc.* At 3900′, B. & H. A large rattan, endemic and common.

PANDANACEAE.

Pandanus bicornis, *Ridl.* 2500-3000′, Ridl.; fruit Dec. A shrub up to 2′, endemic and local.

Pandanus bidens, *Ridl.* At 2000′, H. & N. 2383; fruit Feb. A shrub up to 5′, endemic, 4f.

Pandanus glaucophyllus, *Ridl.* At about 2500′, Ridl.; fruit Dec. A shrub up to 12′, endemic and local.

Pandanus ornatus, *Kurz.* 1000-1800′, Kunstl. 2015, H. & N. 2395; flr. July, fruit Feb. A bush up to 12′, endemic and common.

Pandanus ovatus, *Kurz.* 300-800′, Kunstl. 3758, 6559; fruit Jan., Sept. A creeping shrub of Lower Siam; in Peninsula 1a, 2b, 2c, 2d, 6k, 9k.

Pandanus perakensis, *Ridl.* At Maxwell's Hill, Ridl.; fruit June. A shrub, endemic, 4e.

Pandanus Ridleyi, *Mart.* At 200′, Kunstl. 6839; flr. Nov. A shrub up to 10′, endemic, 5g, 5h, 6k, 7k, 9m.

Pandanus Scortechinii, *Mart.* Up to 300′, Kunstl. 3557. A shrub up to 4′, endemic and local.

Pandanus stelliger, *Ridl.* 2000-3000′, Kunstl. 4166, Ridl. 11625, B. & H. 12700; fruit March, April, Dec. A shrub up to 10′, of Borneo; in Peninsula 5g.

Freycinetia confusa, *Ridl.* At 200′, Wray 2151; flr. June. A climber, endemic, 9m.

Freycinetia lucens, *Ridl.* 100-1000′, Kunstl. 4003, 4091, 7578, 8523; flr. Feb.-April. A climber up to 40′, endemic, 5g, 5j, 9m.

Freycinetia montana, *Ridl.* 3000-4700′, Kunstl. 2619, Ridl. 5194, B. & H. 12557; flr. March, Dec., fruit June, Dec. A climber, endemic, 5g, 5h.

Freycinetia valida, *Ridl.* 4300-4700′, Ridl. 11891, B. & H. 12764; flr. Feb. A climber up to 30′, of W. Malaysia; in Peninsula 2d, 5h, 7k, 9m.

ARACEAE.

Cryptocoryne elliptica, *N. E. Br.* Larut Kunstl. 3166, fide Ridl. An aquatic herb, endemic and local.

Arisaema anomalum, *Hemsl.* 2000-4500′, Wray, Curt. 3714, Ridl., Derry, Hose 29, B. & H. 12581; flr. March, June, Aug., Dec. A tuberous herb, endemic, 4f.

Arisaema Kunstleri, *Hook. fil.* At Taiping, Derry. A tuberous herb, endemic, 1a, 2d.

Arisaema Wrayi, *Hemsl.* 3000-4700′, Wray 30, Ridl., Derry, Hervey, Hose 30, H. & N. 2305, B. & H.; flr. Feb., March, Aug., Sept. A tuberous herb, endemic, 4f.

Amorphophallus minor, *Ridl.* Larut Hills, Ridl. (not seen). A large tuberous herb, endemic, 2d.

Amorphophallus sparsiflorus, *Hook. fil.* At Maxwell's Hill, Wray 111. A large tuberous herb, endemic and local.

Amorphophallus variabilis, *Bl.* Larut Hills, Kunstl., fide Ridl. A tuberous herb of Java, Borneo and the Philippines; in Peninsula 1b.

Colocasia esculenta, *Schott.* 3100-3800′, B. & H.; flr. March. A native of Trop. Asia, now cultivated in all tropics.

Alocasia Beccarii, *Engl.* 4000-4300′, Ridl., Hervey, H. & N. 2350, B. & H. 12769, 13021; flr. March, fruit Feb., March, Dec. A creeping herb of Borneo; in Peninsula 4f, 5g, 5h.

Alocasia Lowii, *Hook. fil.* At 3800′, B. & H. A herb of Java and Borneo; in Peninsula 2b, 2d, 6d, 4e, 5g, 5h, 0j, 9l.

Alocasia ovalifolia, *Ridl.* From 300′ upwards, Ridl., Hend. 10320; flr. Aug., fruit Dec. A herb, endemic, 2d, 5g, 5h, 9l.

Aglaonema Schottianum, *Miq.* At 3000′, Wray 2828; flr. Aug. A stout herb of Burma, Java and Borneo; in Peninsula 1a, 1b, 2b, 2d, 6k, 0k, 9m.

Homalomena argustifolia, *Hook. fil.* At 2000′, Ridl. A creeping herb, of Java; in Peninsula common on rocks in mountain streams.

Homalomena coerulescens, *Jungh.* At 3200′, Ridl., B. & H.; flr. Feb., March, Dec. A stout herb of W. Malaysia; in Peninsula common.

Homalomena Griffithii, *Hook. fil.* Taiping Hills, Ridl. 11421; flr. Dec. A herb of Borneo; in Peninsula 2d, 6e, 5g, 6j, 6k, 7l, 9l, 9m.

Homalomena humilis, *Hook. fil.* 300-3000′, Wray 2069 (var. velutina), Curt., Ridl. 2952; flr. Sept., Oct. A short-stemmed herb of Sumatra and Borneo; in Peninsula 2d, 4e, 3f, 4f, 5g, 5h.

Homalomena nutans, *Hook. fil.* 100-1000′, Kunstl. 2571, fide Ridl. A creeping herb, endemic and local.

Homalomena paludosa, *Hook. fil.* At 300′, Kunstl. 3082; flr. June. A stout herb, endemic, 2d, 9l, 9m.

Homalomena sagittaefolia, *Jungh.* 2000-3200′, Wray, Ridl., B. & H. 12805; flr. Feb. A stout herb of Java and Borneo; in Peninsula common.

Homalomena trapezifolia, *Hook. fil.* 300-4500′, Wray 1976, Ridl., Hend. 10185, 10318; flr. June, fruit Aug. A creeping herb, endemic, 4d.

Schismatoglottis calyptrata, *Zoll. and Mor.*, var. picta, *Hallier.* Larut Hills, Ridl. (not seen). A herb of Indo-Malaya; in Peninsula common.

Schismatoglottis longifolia, *Ridl.* 1000-4500′, Curt. 2082, Ridl., Hend. 10089; flr. Jan., Sept., fruit March. A herb, endemic, 4d.

Piptospatha elongata, *N. E. Br.* 3000-4000′, Wray 3222, Curt., Ridl., Anders. 117; fruit March, Sept. A herb of Borneo; in Peninsula common on rocks in streams.

Anadendrum montanum, *Schott.* 3000-4500′, Wray 704, Ridl. A climbing epiphyte of Malaysia; in Peninsula common, usually at low altitudes.

Scindapsus Beccarii, *Hook. fil.* 100-300′, Wray 2261, Kunstl. 7477; flr. April. A creeping shrub of Sumatra and Borneo; in Peninsula 8e, 3f, 8f.

Scindapsus picta, *Hassk.* 300-800′, Kunstl. 6471; fruit Aug. A long slender climber of Java and Borneo; in Peninsula common.

Scindapsus Scortechinii, *Hook. fil.* 4000-4300′, Ridl., B. & H. 12574; flr. March, June. A climbing shrub, endemic, 2c, 4f, 5g, 5h.

Rhaphidophora Beccarii, *Engl.* At 300′, Wray 1981. A creeping shrub of Siam and Borneo; in Peninsula 2d, 4d, 6e, 4f, 5h, on rocks in streams.

Rhaphidophora crassifolia, *Hook. fil.* At 300′, Wray 2260. A climbing shrub, endemic, 4f, 5h.

Rhaphidophora giganteum, *Ridl.* Larut, Kunstl. 6681, fide Ridl. A large climbing shrub, endemic and common.

Rhaphidophora gracilipes, *Hook.* Larut, Kunstl. 2102, fide Ridl. A climbing shrub, endemic, 4f.

Rhaphidophora Huegeliana, *Schott.* Taiping Hills, Ridl. 11417; flr. Dec. A climbing shrub of Java to the Philippines; in Peninsula common.

Rhaphidophora Korthalsii, *Schott.* 3500-4400′, Wray 4321, Ridl. 11419, B. & H. 12586; flr. and fruit March. A climbing shrub of Java and Borneo; in Peninsula 2d, 5g, 0k, 9m.

Rhaphidophora Kunstleri, *Hook. fil.* 500-800′, Kunstl. 6796; flr. and fruit Nov. A climbing shrub up to 60′, endemic, 4e, 4f, 6f.

Rhaphidophora laetivirens, *Ridl.* Larut Hills, Derry. A creeping shrub, endemic, 2d, 5h.

Rhaphidophora Lobbii, *Schott.* Larut, Kunstl., fide Ridl. A slender climbing shrub of Borneo; in Peninsula Taiping to Singapore.

Rhaphidophora Wrayi, *Hook. fil.* 3000-3600′, Ridl. 2960, 11418, B. & H. 12975; flr. Dec. Fruit March. A climbing shrub, endemic, 2d, 4f, 5g.

Podolasia stipitata, *N. E. Br.* 2000-2500′, Curt., Ridl.; flr. Sept., fruit Feb., June. A creeping herb of Sumatra and Borneo; in Peninsula 3f, 8l, 9l.

Cyrtosperma lasioides, *Griff.* At Batu Kurau, Curt., 2988; flr. Oct. A thorny aquatic herb of Borneo; in Peninsula common.

Pothos Barberianus, *Schott.* At 2500′, Wray 4235 (var. Wallichii) Curt., Ridl.; flr. Sept. A climbing herb of Sumatra and Borneo; in Peninsula 3f, 5g.

Pothos Kingii, *Hook. fil.* 300-3000′, (fide Ridl.), Wray 3277. A climbing herb up to 30′, endemic and local.

Pothos latifolius. *Hook. fil.* 500-2000′, Wray 4236, Kunstl. 3887, 3983, Curt. 2987, Ridl. 11420; flr. Feb., Oct., Dec., fruit Feb. A climbing herb of Malaysia; in Peninsula common.

Pothos macrocephalus, *Scort.* At Waterloo, 1000′, Curt. 2895; flr. Oct. A climbing herb, endemic, 4f.

CYPERACEAE.

Kyllinga melanosperma, *Nees.* At 4750′, B. & H. 12888. A sedge of Africa, and Indo-Malaya to the Philippines; in Peninsula 9m.

Cyperus diffusus, *Vahl.*, var. pubisquama, *Ridl.* At Maxwell's Hill, Bishop Hose 51. A sedge up to 3′, the species pantropic; in Peninsula both the species and var. common.

Cyperus Haspan, *Linn.* At 3800′, B. & H. 13028. A sedge, pantropic; in Peninsula common.

Cyperus Iria, *Linn.* At Taiping, Ridl. (not seen). A sedge of the tropics and sub-tropics of the Old World; in Peninsula common.

Cyperus pilosus, *Vahl.* At Taiping, Ridl. A sedge of Africa and Indo-Australia; in Peninsula common in marshes.

Cyperus Zollingeri, *Steud.* At Taiping, Ridl. A sedge of Trop. Africa and Indo-Australia; in Peninsula common.

Mariscus Sieberianus, *Nees.* At 300′, Hend. 10310. A sedge, pantropic; in Peninsula common.

Fimbristylis acuminata, *Vahl.* At Taiping, Ridl. (not seen). A tufted sedge of Indo-Australia; in Peninsula common.

Scirpus erectus, *Poir.* At Taiping, Ridl. A sedge of Asia, Australia, and N. America; in Peninsula common.

Scirpus mucronatus, *Linn.* At Taiping, Ridl. A sedge of Europe, African Islands, and Indo-Australia; in Peninsula common.

Rhynchospora aurea, *Vahl.* At Batu Kurau, Haniff 13264. A sedge up to 3′, pantropic; in Peninsula common.

Actinoschoenus filiformis, *Benth.* At 300′, Ridl. A sedge of Indo-Malaya; in Peninsula 2c, 2d, 6e, 7k.

Gahnia javanica, *Mor.* 1000-4750′, Curt. 2079, Ridl., B. & H. A large tufted sedge of Malaysia; in Peninsula common.

Mapania humilis, *Naves and Villar.* 2000-4000′, Curt. 2081, Ridl. A small tufted plant of W. Malaysia to the Philippines; in Peninsula common.

Mapania Kurzii, *Clarke.* 700-4000′, Wray 1852, Curt., Ridl. 11425, B. & H. 13036. A large tufted plant, endemic, 2d, 4d, 6k.

Mapania longispica, *Ridl.* 1200-2000′, Ridl. 11424, Hend. 10105, 10429. A tufted plant, endemic and local.

Mapania palustris, *Benth.* 300-400′, Ridl., Hend. 10463. A large tufted plant of ?Java; in Peninsula common.

Scleria elata, *Thwaites.* Up to 4700′, Ridl. A sedge up to 3′, of Indo-Malaysia; in Peninsula 2d, 4d, 4f, 5g.

Scleria multifoliata, *Boeck.* At 300′, Ridl. A sedge up to 3′, of Indo-Malaya; in Peninsula common.

Carex cryptostachys, *Brngn.* 2000-4000′, Kunstl. 8517, Ridl. 11399, Anders. 116. A sedge of W. Malaysia and China; in Peninsula 2d, 3f, 4f, 6k, 7l, 8l, 9m.

Carex perakensis, *Clarke.* 2900-3000′, Ridl. 11423, B. & H. 12694. A sedge, endemic, 4f, 5g.

GRAMINEAE.

Paspalum conjugatum, *Berg.* 3800-4750′, B. & H. A pantropic grass, common in the Peninsula, but probably introduced.

Paspalum scrobiculatum, *Linn.* 100-4750′, Hend. 10153, B. & H. A grass, pantropic; in Peninsula common.

Isachne albens, *Trin.* 3000-4750′, Wray, Ridl. 3115, 11913, Bishop Hose 58, B. & H. 12887. A grass up to 4′, of Indo-Malaya and China; in Peninsula 6e, 4f, 5g.

Isachne australis, *R. Br.* At Taiping, Bishop Hose 74. A grass up to 2′, of Indo-Australia; in Peninsula common.

Panicum auritum, *Presl.* 100-300′, Ridl., Bishop Hose 55. A grass up to 6′,of Indo-Malaya and China; in Peninsula common.

Panicum maximum, *Jacq.* At 4000′, Ridl. Guinea-grass. A native of Africa, cultivated in all tropics.

Panicum muticum, *Forsk.* At Taiping, Bishop Hose 53. A grass up to 8′, pantropic; in Peninsula cultivated and as an escape.

Panicum myosuroides, *Br.* At Taiping, Bishop Hose 68. A tall grass of Indo-Australia and Africa; in Peninsula common.

Panicum ovalifolium, *Poir.* At 2000′, Ridl. A small grass of Trop. Africa and Indo-Malaya; in Peninsula common.

Panicum perakense, *Merrill.* At Taiping, in water, Bishop Hose 56. A grass up to 4′, of Borneo; in Peninsula 4d, 8k, 7l, 9l.

Panicum pilipes, *Nees and Arn.* 300-800′, Kunstl. 2787, Bishop Hose 73. A creeping grass of Indo-Australia and the Mascarene Is.; in Peninsula common.

Panicum sarmentosum, *Roxb.* 100-4500′, Wray, Kunstl. 2515, Ridl., Bishop Hose 54. A tall grass of Indo-Malaya; in Peninsula common.

Ichnanthus pallens, *Munro.* At 4000′, Bishop Hose 61. A grass, pantropic; in Peninsula 1b, 4f, 5g, 5h, 6k, 8l, 9l.

Thysanolaena agrostis, *Nees.* 100-4000′, Bishop Hose, Hend. 10155, B. & H. 12928, 13221. A grass up to 12′, of Indo-Malaysia; in Peninsula 2d, 4d, 4f, 5g.

Setaria glauca, *Beauv.* At Taiping, Bishop Hose 66, Ridl. 11402. A tufted grass, cosmopolitan; in Peninsula common.

Leersia hexandra, *Sw.* At Taiping, Bishop Hose 72. A grass up to 3′, pantropic; in Peninsula common.

Leptaspis urceolata, *Br.* On G. Hijau to 4500′, B. & H. A grass of Indo-Malaya; in Peninsula common in dense forest.

Imperata arundinacea, *Cyrillo.* At 4750′, B. & H. Lallang. A pantropic grass; in Peninsula very common.

Saccharum arundinaceum, *Retz.* At Taiping, Hend. 10156. A grass up to 15′, of Indo-Malaya; in Peninsula common.

Pogonatherum saccharoideum, *Beauv.* At 4750′, B. & H. A grass of S. E. Asia; in Peninsula 2d, 4d, 6e, 4f, 5h, 8h, 6k, 9k.

Rottboellia glandulosa, *Trin.* At Taiping, Ridl. A grass up to 6′, of Indo-Australia; in Peninsula common.

Andropogon aciculatus, *Retz.* Maxwell's Hill clearing, B. & H. A grass of Trop. Asia and Australia; in Peninsula common.

Anthistiria gigantea, *Cav.* At Taiping, Hend. 10152. A grass up to 16′, of Indo-Australia and China; in Peninsula common.

Sphaerocaryum elegans, *Nees.* At 4000′, B. & H. 12744. A creeping grass of India and China; in Peninsula 3f, 6k, 9l, 9m.

Sporolobus indicus, *Br.* At 4750′, B. & H. A pantropic grass; in Peninsula common.

Cynodon dactylon, *Pers.* At 3700′, B. & H. A pantropic grass; in Peninsula common.

Phragmites Karka, *Trim.* At Taiping, Bishop Hose 67. A reed up to 12′, of Indo-Australia and Africa; in Peninsula common.

Neyraudia madagascariensis, *Hook. fil.* At 300′, Ridl. A reed up to 12′, of Trop. Asia and Africa; in Peninsula 1b, 2b, 2d, 5j, 6k.

Eragrostis elegantula, *Steud.* At Taiping, Bishop Hose 64. A grass up to 4′, of Indo-Malaya and S. China; in Peninsula common.

Eragrostis elongata, *Jacq.* At Taiping, Ridl. A grass of Indo-Australia; in Peninsula common.

Lophatherum gracile, *Brngn.* 4000-4500′, Wray, Fox, Ridl., Hervey. A tall grass of S. E. Asia except S. India, and Japan; in Peninsula common.

Poa annua, *Linn.* 3700-4000′, Ridl., B. & H. A small grass, cosmopolitan; in Peninsula not common.

Gigantochloa Kurzii, *Gamble.* At Taiping, Wray 134, fide Ridl. A bamboo of Tenasserim and Siam; in Peninsula 3f, 4f.

Dendrocalamus giganteus, *Munro.* Below G. Hijau, Ridl. (not seen.) A bamboo up to 100′, endemic, Penang to Malacca.

GNETACEAE.

Gnetum Brunonianum, *Griff.* 2000-3600′, Ridl. 2783, B. & H. 12710; flr. March. An erect shrub of Tenasserim and Borneo; in Peninsula common.

Gnetum funiculare, *Bl.* 100-200′, Hend. 10241, 10323; fruit Aug., Nov. A liane of Indo-Malaya; in Peninsula common.

Gnetum Kingianum, *Gamble.* At Kota, Wray 2851, fide Gamble. A liane, endemic, 4f, 6j, 0j, 6k, 9m.

Gnetum Ridleyi, *Gamble.* At 4000′, Ridl. A climbing shrub, endemic, 4f.

Gnetum tenuifolium, *Ridl.* At Taiping, Ridl. 14565. A slender climber of Lower Siam; in Peninsula common as far south as Malacca.

Gnetum Wrayi, *Gamble.* Larut, Kunstl. 5283, 6590, fide Gamble. A climbing shrub, endemic, 6e, 8g, 9m.

CONIFERAE.

Agathis alba, *Foxworthy.* Common from about 2500′ upwards, Wray. A lofty tree of Indo-China to the Philippines; in Peninsula 2c, 2d, 6e, 5g, 7h.

RELATIVE HUMIDITY of the air at the Botanic Gardens Singapore, from wet and dry bulb hygrometer readings made daily at 9. a.m. during the year 1924.

Date.	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	100	80	91	82	76	83	83	95	83	79	76	75
2	87	87	81	81	79	84	76	79	89	77	74	79
3	85	80	87	84	84	95	80	77	81	68	67	69
4	87	93	95	82	74	85	81	68	87	70	88	66
5	91	87	78	85	76	81	75	83	78	75	91	84
6	100	79	79	80	77	81	88	81	75	62	85	89
7	100	87	98	84	..	95	87	75	83	64	91	73
8	76	80	79	82	93	93	89	76	72	62	95	90
9	81	87	91	81	75	81	77	76	75	62	85	78
10	83	77	83	76	95	79	90	75	77	62	84	95
11	78	81	76	76	87	83	93	76	91	72	79	91
12	78	95	81	78	91	85	83	78	81	82	77	74
13	85	87	77	78	85	79	100	79	93	77	66	75
14	77	100	83	84	87	83	76	86	..	84	86	74
15	81	90	78	81	89	82	77	78	75	93	75	75
16	78	85	89	83	83	80	77	77	79	72	79	71
17	81	83	78	79	79	79	77	83	93	93	84	84
18	79	78	100	..	87	77	77	81	78	76	91	84
19	72	79	76	76	89	74	79	77	83	93	78	78
20	91	81	91	83	87	93	81	76	77	77	83	78
21	76	80	81	76	80	77	79	79	93	73	72	82
22	76	83	87	95	98	72	72	95	79	84	79	86
23	91	80	93	80	87	86	77	85	89	81	91	69
24	83	87	76	77	100	79	72	75	77	74	79	71
25	78	83	83	89	81	85	74	71	76	95	86	75
26	..	79	85	80	80	91	74	71	84	81	95	69
27	91	80	91	80	81	81	93	83	89	95	81	67
28	78	83	91	69	95	83	75	79	91	72	89	68
29	81	82	93	76	78	90	75	83	77	86	89	69
30	77	..	95	78	87	95	75	68	77	77	83	69
31	80	..	80	..	81	..	79	86	..	83	..	75
Average	83.4	83.9	85.35	80.5	84.7	83.7	80.35	79.1	82.1	77.45	82.6	76.9

Average for the year 81.7.

RAINFALL

at the Botanic Gardens, Singapore, during the first half of the year, 1924.

Readings taken at 9 a.m. and expressed in inches.

Date	Jan.	Feb.	March.	April.	May.	June.
1	2.01	trace	.30	.62	..	..
2	.22	..	.13	.08	..	..
3	.01	1.65	.35	trace	trace	1.57
4	.59	.09	1.57	.01	..	.08
5	.07	1.10	.02	.47	.13	..
6	.42	.07	.01	..	..	..
7	.32	.32	..	..	..	1.15
8	.01	1.21	..	..	1.60	.91
9	..	.87	trace	..	.09	trace
10	.32	.81	..	.01	.70	..
11	..	1.17	.36	..	.12	..
12	.61	.09	trace	..	.59	.01
13	..	3.44	trace	trace	.02	.13
14	.10	.98	..	.01	.52	.09
15	.64	2.90	trace	.11	trace	..
16	.01	.08	.25	..	.01	.01
17	..	..	.10	.18	.70	.10
18	.03	.02	2.02	..	.25	.12
19	.03	.02	.60	1.11	trace	..
20	.53	..	.14	.04	.05	.24
21	..	.02	.64	..	.40	.06
22	.08	..	.70	.80	.25	..
23	1.87	..	.07	.01	.09	trace
24	.10	..	.01	.10	.53	.01
25	..	.68	1.55	.72	.03	..
26	.01	..	1.25	.03	..	.48
27	.01	..	.14	.02	..	.13
28	..	.06	.37	..	.81	trace
29	..	1.58	trace	..	.10	.75
30	..		.01	.03	.53	.01
31	..		.03		.15	
Total	7.99	17.16	10.62	4.35	7.67	6.10

RAINFALL

at the Botanic Gardens, Singapore, during the first half of the year, 1924.

Readings taken at 9 a.m. and expressed in inches.

Date	July.	Aug.	Sep.	Oct.	Nov.	Dec.
1	.01	.76	.20	..	.45	..
2	.02	.59	.54	.15	.12	.
3	.20	1.43	1.73	.29	..	..
4	trace	trace	.09	..	.11	..
5	..	..	.27	..	.04	.41
6	.09	..	..	..	.05	.17
7	.13	.42	..	..	.65	.03
8	1.20	..	..	..	.82	1.32
9	.15	..	..	..	.25	.01
10	2.54	..	.03	..	.19	.59
11	.27	..	.71	..	.06	.10
12	.01	.02	.01	.13	trace	trace
13	.45	..	.29	.12	..	.11
14	..	.04	..	trace	.07	.19
15	..	.01	.13	.02	.01	.17
16	..	trace	..	.10	.01	.
17	.03	.41	.55	1.52	.34	.49
18	..	.39	.09	trace	.06	.02
19	..	.24	3.23	.12	.06	.11
20	..	..	.01	.16	..	.02
21	.07	.40	.04	..	..	.39
22	..	1.81	.02	trace	..	.41
23	..	.08	.11	.06	1.03	.15
24	..	..	..	1.93	trace	.01
25	..	..	..	1.45	trace	..
26	..	.02	.09	.03	.07	..
27	2.57	.03	.74	1.32	.04	.09
28	.01	.13	.47	.01	1.24	..
29	..	..	.01	trace	.10	..
30	..	..	4.24	trace	..	..
31	..	.34		.67		..
Total	7.75	7.12	13.60	8.08	5.77	4.79

RAINFALL

at the head of the Waterfall Gardens, Penang during the first half of the year 1924, in inches.

Readings taken at 8 a.m. and credited to the date in which the twenty-four hours begin. Data kindly supplied by the Municipal Commissioners of George Town, Penang.

Date	Jan.	Feb.	March.	April.	May.	June.
1	.49	..	..	2.18	.17	..
2	1.58	.05	.80	.03	.13	.67
3	..	..	.25	1.65	.50	.49
4	.04	..	..	..	.07	.01
5	.02	..	..	1.17	.10	.02
6	.06	.45	.02	.01	..	.09
7	..	..	..	..	..	.81
8	.06	.03	.17	..	..	.02
9	.02	.33	.02	..	.04	..
10	..	..	..	1.54	.09	.59
11	.38	..	.24	..	.03	.
12	.04	..	.85	.04	.33	..
13	.01	.28	.59	..	1.10	..
14	..	.01	..	..	.63	..
15	..	.01	1.55	1.20	2.65	..
16	3.25	.04	.14	5.73	.67	..
17	.20	..	..	.22	.23	..
18	..	..	.60	.02	.11	..
19	.45	..	.38	..	..	.68
20	..	..	.11	.57	.03	.03
21	..	..	.14	..	1.20	.01
22	.04	..	.41	.31	.04	.62
23	..	1.55	..	.03	.13	.68
24	..	.05	.63	1.81	.04	.79
25	..	..	4.65	.16	.02	.65
26	..	.05	..	..	..	.18
27	..	3.05	..	.87	..	.06
28	..	.70	..	..	.04	2.98
29	..	..	.86	..	.87	.83
30	..		..	..	..	..
31	..		..		..	
Total	6.64	6.60	12.41	15.54	9.58	10.51

RAINFALL

at the head of the Waterfall Gardens, Penang, during the second half of the year 1924, in inches.

Readings taken at 8 a.m. and credited to the date in which the twenty-four hours begin. Data kindly supplied by the Municipal Commissioners of George Town, Penang.

Date	July.	Aug.	Sep.	Oct.	Nov.	Dec.
1	.29	..	.67	10.25	..	..
2	.04	.02	.26	2.67	.02	.03
3	..	..	.56	..	.55	..
4	.17	..	4.57	.02	.06	.26
5	..	..	.10	.63	.90	..
6	.47	.18	..	..	1.68	.03
7	..	..	..	..	..	.03
8	.03	..	.75	..	.02	.07
9	1.81	..	..	.02	3.97	.26
10	..	..	1.68	.02	.06	..
11	..	.43	.02	.25	.44	..
12	..	.02	.14	2.40	.03	..
13	..	.04	.23	.85	1.18	.03
14	..	2.05	.26	.96	..	..
15	..	..	.40	.61	..	.07
16	..	.08	..	1.18	.03	..
17	..	.02	1.08	.55	.11	.03
18	..	..	.25	.38	.65	.02
19	..	..	.05	.58	.89	1.47
20	2.29	..	.13	..	1.10	.07
21	.30	.03	.60	..	.06	..
22	..	.03	..	..	2.45	.01
23	..	.01	.69	.96	.51	..
24	..	.07	.66	.06	.25	..
25	..	..	1.79	.35	.20	..
26	..	.01	3.59	..	.67	..
27	..	1.28	1.76	..	.04	..
28	.06	.10	.02	.05	..	..
29	..	4.45	3.93	1.70	..	..
30	1.27	1.20	.13	.07	..	.02
31	.03	.45		.16		..
Total	6.76	10.47	24.32	24.72	15.87	2.40

Summary of Rainfall 1924.

	SINGAPORE.				PENANG.			
	No. of rainy days	Amount of rain		Longest Spell without rain	No. of rainy days	Amount of rain		Longest Spell without rain
		inches	mm.			inches	mm.	
January	21	7.99	203	4 days.	14	6.64	168	9 days.
February	21	17.16	436	3 „	13	6.60	167	6 „
March	27	10.62	270	2 „	18	12.41	315	3 „
April	19	4.35	110	4 „	17	15.54	395	3 „
May	24	7.67	194	2 „	23	9.58	243	3 „
June	20	6.10	155	2 „	19	10.54	268	8 „
July	16	7.75	197	5 „	11	6.76	171	10 „
August	19	7.12	181	4 „	18	10.47	261	4 „
September	22	13.60	345	4 „	25	24.32	618	2 „
October	21	8.08	205	8 „	22	24.72	628	3 „
November	24	5.77	146	3 „	23	15.87	403	3 „
December	20	4.79	122	4 „	14	2.40	61	7 „
Total	254	101.00	2564		217	145.85	3698	

Greatest amount in 24 hrs.	4.24 ins. or 108mm.	10.25 ins. or 260mm.
„ „ 48 hrs.	4.42 ins. or 112mm.	12.92 ins. or 328mm.
„ „ 72 hrs.	7.32 ins. or 186mm.	14.31 ins. or 364mm.

Excessively rainy periods, more than 5 ins. having fallen in 72 hours	1 (Feb.)	6 (Mar., Apr., Aug., Sept. (2) Oct.)
No. of days when condition persisted	1	14
Periods of comparative drought, less than .02 ins. having fallen in 120 hours .. .. .. (Jan.-Feb., March, Apr., July, Oct., Nov.-Dec.)	6	6 (Jan.-Feb., Feb., June, July (2) Dec.)
No. of days when the condition occurred	15	27

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Departmental Notices.

A list of plants which can be purchased at the Botanic Gardens, in Singapore and in Penang, can be had upon application. The same list appears at intervals in the Government Gazette.

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